

**BEFORE  
THE PUBLIC SERVICE COMMISSION  
OF SOUTH CAROLINA**

**DOCKET NO. 2018-72-E**

In re:

Application of Duke Energy Carolinas, LLC  
for Approval of Demand-Side Management  
and Energy Efficiency Rider 10

**DUKE ENERGY CAROLINAS, LLC'S  
AMENDED APPLICATION FOR  
APPROVAL OF RIDER 10**

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Pursuant to S.C. Code Ann. § 58-37-20 (2015) and 10 S.C. Code Reg. 103-819 and 823 (2012), the Rules of Practice and Procedure of the Public Service Commission of South Carolina (“Commission”), Duke Energy Carolinas, LLC (the “Company” or “Duke Energy Carolinas”) hereby applies to the Commission for approval of its demand-side management (“DSM”) and energy efficiency (“EE”) rider for 2019 (“Rider 10”). Duke Energy Carolinas also requests that the Commission allow it to recover the costs of its Interruptible Service and Stand-By Generator programs (“Existing DSM Programs”) as a component of this Rider 10. Finally, Duke Energy Carolinas reports the results of the study designed to assess the feasibility and estimated cost associated with its achievement of EE goals established in a settlement agreement in Docket Nos. 2011-158-E and 2011-68-E.

In support of this Amended Application, Duke Energy Carolinas shows the Commission the following:

**Name and Address of Duke Energy Carolinas**

1. The correct name and post office address of the Company is Duke Energy Carolinas, LLC, Post Office Box 1321, Charlotte, North Carolina 28201.

**Notices and Communications**

2. The names and addresses of the attorneys of Duke Energy Carolinas who are authorized to receive notices and communications with respect to this Amended Application are:

Rebecca J. Dulin  
Duke Energy Corporation  
1201 Main Street, Capital Center Building, Suite 1180  
Columbia, SC 29201  
Tel. 803.988.7130  
*rebecca.dulin@duke-energy.com*

Samuel J. Wellborn  
SOWELL GRAY ROBINSON STEPP & LAFFITTE, LLC  
1310 Gadsden Street  
Columbia, SC 29201  
Tel. 803.231.7829  
*swellborn@sowellgray.com*

### **Description of the Company**

3. The Company is engaged in the generation, transmission, distribution, and sale of electric energy at retail in the western portion of South Carolina and central and western portions of North Carolina. It also sells electricity at wholesale to municipal, cooperative, and investor-owned electric utilities. Duke Energy Carolinas is a public utility under the laws of South Carolina and is subject to the jurisdiction of this Commission with respect to its operations in this State. The Company also is authorized to transact business in the State of North Carolina and is a public utility under the laws of that state. Accordingly, its operations in North Carolina are subject to the jurisdiction of the North Carolina Utilities Commission.

### **Background**

4. Rider 10 seeks to recover from customers the amounts associated with the cost recovery mechanism the Commission approved in Order No. 2013-889, issued in Docket No. 2013-298-E, as well as the costs associated with Existing DSM Programs.

5. The recovery mechanism of the Company's EE/DSM portfolio is a shared savings model with three distinct components: (1) recovery of the costs the Company incurs to offer and deliver EE and DSM programs to customers; (2) recovery of net lost revenues incurred for up to thirty-six (36) months of a measure's life for EE programs; and (3) a shared savings incentive that is equivalent to 11.5% of net savings achieved through the Company's portfolio of EE/DSM programs.

6. The Existing DSM Program recovery method remains unchanged.

### **Components of Rider 10**

7. Calculations for Rider 10 were computed in accordance with the Application, testimony and the Commission's Order in Docket No. 2013-298-E. The specific components of Rider 10 include:

- a. Year 2014,<sup>1</sup> January 2014 – December 2014: true-up of shared savings and Year 4 lost revenues.
- b. Year 2015, January 2015 – December 2015: true-up of shared savings, true-up of Year 1, Year 2 and Year 3 lost revenues.
- c. Year 2016, January 2016 – December 2016: true-up of shared savings, true-up of Year 1 and Year 2 lost revenues and an estimate of Year 4 lost revenues.
- d. Year 2017, January 2017 – December 2017: true-up of program costs, shared savings and Year 1 of lost revenue and an estimate of Year 3 lost revenues.
- e. Year 2018, January 2018 – December 2018: estimate of Year 2 lost revenues.
- f. Year 2019, January 2019 – December 2019: estimate of program costs, shared savings, and Year 1 lost revenues, as well as an estimate of 2019 existing DSM program costs.

### **Rider 10 Rate Overview**

8. The revenue Duke Energy Carolinas proposes to recover through the proposed Rider 10<sup>2</sup> is as follows:

- \$48,552,591 for Residential Customers (Exhibit A, Line 15) and
- \$71,201,272 for Non-Residential Customers (Exhibit A, Line 66).

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<sup>1</sup> In the Company's 2013 filing, the nomenclature for a vintage changed from "Vintage" year to "Year 2014," "Year 2015," etc.

<sup>2</sup> Billed at 100%, pursuant to Order 2013-889.

For Rider 10, because non-residential customers can opt-out of various components and vintage years of EE/DSM, those billing factors were separated to reflect non-residential customer participation in EE programs, DSM programs, or both EE and DSM programs. The proposed Rider 10 billing factors include prospective and true-up components. Based on the total costs to be recovered under the proposed Rider 10, as shown on Exhibit A, the billing factors applicable to South Carolina customers for the billing period January 1, 2019 through December 31, 2019, would be as follows:

<b>Residential Billing Factors</b>	<b>¢/kWh</b>
True-up Component for Years 2014, 2015, 2016 and 2017	0.1911
Prospective Component for Vintage Years 2016 – 2019	0.5552
Residential Rider 10 (Total)	0.7463

<b>Non-Residential Billing Factors</b>	<b>¢/kWh</b>
Year 2014 EE Participant – True up	0.0015
Year 2014 DSM Participant – True up	0.0010
Year 2015 EE Participant – True up	0.0438
Year 2015 DSM Participant – True up	0.0029
Year 2016 EE Participant – True up	0.0177
Year 2016 DSM Participant – True up	0.0006
Year 2017 EE Participant – True up	0.5596
Year 2017 DSM Participant – True up	0.0128
Year 2016 EE Participant - Prospective	0.0403
Year 2017 EE Participant – Prospective	0.1345
Year 2018 EE Participant – Prospective	0.1267
Year 2018 DSM Participant – Prospective	0.0058
Year 2019 EE Participant – Prospective	0.5193
Year 2019 DSM Participant – Prospective	0.1341

9. The proposed tariff sheet for Rider 10 is attached as Exhibit B to the Amended Application. A summary of the calculations used to determine these billing factors and the revenue

requirement for Rider 10 is attached as Exhibit A to the Amended Application. The supporting calculations for Exhibit A are also attached. A detailed description and evaluation of the Company's EE and DSM programs for 2017 is set forth in Rider 10, Exhibit 5.

#### **Settlement Agreement Analysis of Energy Efficiency Portfolio**

10. As a component of the Revised Settlement Agreement in Docket No. 2013-298-E, the Company agreed to develop a study designed to assess the feasibility and estimated cost associated with its achievement of aspirational Energy Efficiency Goals established in the settlement agreement in Docket Nos. 2011-158-E and 2011-68-E, *i.e.*, an annual savings target of one percent (1%) of the previous year's retail electricity sales beginning in 2015 and a cumulative savings target of seven percent (7%) of retail electricity sales over the five-year time period of 2014 - 2018. As required under the Revised Settlement Agreement, the Company has provided an update to the Energy Efficiency Analysis Study which accounts for the updated actual savings in 2017 as well as an updated projection of 2018 - 2019 in the Base Portfolio. The methodology for estimating the size and cost of the Incremental Portfolio is unchanged compared to last year. The updated Analysis Study is attached to this application as Rider 10 Exhibit 8.

#### **Conclusion and Request for Approval**

11. Based on the foregoing, the Company respectfully requests that the Commission grant its application seeking approval of Rider 10 as described in this Amended Application and supporting exhibits. Additionally, the Company acknowledges that the Commission, in Order No. 2018-205, required that notice of the filing be made, and held the Company's request for waiver of the hearing in abeyance until the intervention period has expired. The proposed rates do not require a determination of the entire rate structure and overall rate of return, and will facilitate an orderly rate administration.

Submitted this the 1st day of May, 2018.



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Rebecca J. Dulin  
Senior Counsel  
Duke Energy Carolinas, LLC  
1201 Main Street, Capital Center Bldg, Suite 1180  
Columbia, SC 29201  
Tel. 803-988-7130  
*rebecca.dulin@duke-energy.com*

Samuel J. Wellborn  
SOWELL GRAY ROBINSON STEPP & LAFFITTE, LLC  
1310 Gadsden Street  
Columbia, SC 29201  
Tel. 803.231.7829  
*swellborn@sowellgray.com*

**Rider 10 Exhibits**

AMENDED Exhibit A	Summary for Rider EE Exhibits and Factors
AMENDED Exhibit B	Tariff Sheet
Year 2014 Exhibit 1, as filed March 2, 2018	True Up of Shared Savings and Year 1, 2, 3 and 4 Lost Revenues Applicable to Residential and Non-Residential Customers
Year 2014 Exhibit 2, as filed March 2, 2018	Load Impacts and Estimated Revenue Requirements for Program Year 2014
Year 2014 Exhibit 3, as filed March 2, 2018	Allocation Factors, Vintage Year 2014
AMENDED Year 2015 Exhibit 1	True-up of Shared Savings and Year 1 ,2 and 3 Lost Revenue; Estimate of Year 4 Lost Revenue Applicable to Residential and Non-Residential Customers
Year 2015 Exhibit 2, as filed March 2, 2018	Load Impacts and Estimated Revenue Requirements for Program Year 2015
Year 2015 Exhibit 3, as filed March 2, 2018	Allocation Factors, Vintage Year 2015
AMENDED Year 2016 Exhibit 1	True-up of Shared Savings and Year 1 and 2 Lost Revenue; Estimate of Year 3 Lost Revenue Applicable to Residential and Non-Residential Customers
Year 2016 Exhibit 2, as filed March 2, 2018	Load Impacts and Estimated Revenue Requirements for Program Year 2016
Year 2016 Exhibit 3, as filed March 2, 2018	True up of Year 1 Shared Savings, Program Costs and Lost Revenues; Estimate of Year 3 Lost Revenue
AMENDED Year 2017 Exhibit 1	Estimated Year 2 Lost Revenues – Year 2017
Year 2017 Exhibit 2, as filed March 2, 2018	Load Impacts and Estimated Revenue Requirements for Program Year 2017
Year 2017 Exhibit 3, as filed March 2, 2018	Actual Existing DSM Program Costs – Year 2017



Year 2017 Exhibit 4, as filed March 2, 2018	Allocation Factors, Year 2017
Year 2017 Exhibit 5, as filed March 2, 2018	Actual Program Costs – Year 2017
Year 2017 Exhibit 6, as filed March 2, 2018	Changes from Rider 8 Due to Application of M&V and Participation
Year 2018 Exhibit 1, as filed March 2, 2018	Estimate of Year 2 Lost Revenues
Year 2019 Exhibit 1, as filed March 2, 2018	Estimated Annual Rider Applicable to Residential Customers
Year 2019 Exhibit 1, page 2, as filed March 2, 2018	Estimated Annual Riders Applicable to Non-Residential Customers
Year 2019 Exhibit 2, as filed March 2, 2018	Load Impacts and Estimated Revenue Requirements for Program Year 2019
Year 2019, Exhibit 3, as filed March 2, 2018	Allocation Factor Estimate for 2019
Rider 10 Exhibit 1, Page 1, as filed March 2, 2018	Lost Revenue Summary – Year 2014
AMENDED Rider 10 Exhibit 1, Page 2	Lost Revenue Summary – Year 2015
AMENDED Rider 10 Exhibit 1, Page 3	Lost Revenue Summary – Year 2016
AMENDED Rider 10 Exhibit 1, Page 4	Lost Revenue Summary – Year 2017
Rider 10 Exhibit 1, Page 5, as filed March 2, 2018	Lost Revenue Summary – Year 2018
Rider 10 Exhibit 1, Page 6, as filed March 2, 2018	Lost Revenue Summary – Year 2019
Rider 10 Exhibit 2, page 1, as filed March 2, 2018	DSM/EE Revenues Collected from Riders (By Vintage)

Rider 10 Exhibit 2, page 2, as filed March 2, 2018	Revised Exhibit Summary for 2018 Estimated Revenue
Rider 10 Exhibit 2, page 3, as filed March 2, 2018	Revised Forecasted Sales for Years 2014-2018
Rider 10 Exhibit 3, page 1, as filed March 2, 2018	Forecasted kWh Sales for Rate Period (Years 2014-2019)
Rider 10 Exhibit 3, page 2, as filed March 2, 2018	Forecasted kWh Net Metering Impacts for Year 2019
AMENDED Rider 10 Exhibit 4, Page 1	Residential Interest Calculation – Years 2014-2015
AMENDED Rider 10 Exhibit 4, Page 2	Residential Interest Calculation - Years 2016-2017
Rider 10 Exhibit 4, Page 3, as filed March 2, 2018	Non-Residential Interest Calculation – Year 2014
AMENDED Rider 10 Exhibit 4, Page 4	Non-Residential Interest Calculation – Year 2015
AMENDED Rider 10 Exhibit 4, Page 5	Non-Residential Interest Calculation – Year 2016
AMENDED Rider 10 Exhibit 4, page 6	Non-Residential Interest Calculation – Year 2017
Rider 10 Exhibit 5 (not re- filed)	Evaluation, Measurement and Verification Report
Rider 10 Exhibit 6 (not re- filed)	Description and Evaluation of EE and DSM Programs for 2017
Rider 10 Exhibit 7 (not re- filed)	Vintage Years 2014, 2015, 2016, 2017 and 2018 Non- Residential Opt-Out Data
Rider 10 Exhibit 8 (not re- filed)	Settlement Agreement Analysis of Energy Efficiency Portfolio

Duke Energy Carolinas  
For the Period January 1, 2014 - December 31, 2019  
Docket Number 2018-XX-E  
Exhibit Summary for Rider EE Exhibits and Factors

**Residential Billing Factor**

1	Costs to be Recovered for Year 2014 True Up	Year 2014 Exhibit 1, Line 16	(26,057)
2	Costs to be Recovered for Year 2015 True up	Year 2015 Exhibit 1, Line 16	200,073
3	Costs to be Recovered for Year 2016 True up	Year 2016 Exhibit 1, Line 16	685,078
4	Costs to Be Recovered for Year 2017 True up	Year 2017, Exhibit 1, Line 16	11,573,242
5	Total Cost to be Recovered Vintages Year 2014, Year 2015, Year 2016 and Year 2017 True-ups	Line 1 through line 4	\$ 12,432,335
6	Projected SC Residential Sales (kWh) for rate period	R10 Exhibit 3, Page 1 Line 3	6,505,643,783
7	Revenue Requirement True-up Component for <b>Residential Rider EE (cents per kWh)</b>	Line 5 / Line 6 * 100	<b>0.1911</b>
7A	Costs to be Recovered for Vintage Year 2016 Prospective Amounts	Year 2016 Exhibit 1 Line 16	1,401,449
8	Costs to be Recovered for Vintage Year 2017 Prospective Amounts	Year 2017 Exhibit 1 Line 16	3,175,509
9	Costs to be Recovered for Vintage Year 2018 Prospective Amounts	Year 2018 Exhibit 1 Line 1	2,340,939
10	Costs to be Recovered for Vintage Year 2019 Prospective Amounts	Year 2019, Exhibit 1, pg 1 Line 12	28,944,904
11	Less: Costs to be Recovered through Solar Access Fee	R10 Exhibit 3 page 2	257,455
12	Total Prospective Components of Residential Revenue Requirement	Line 7 through Line 13	\$ 36,120,256
13	Projected SC Residential Sales (kWh) for rate period	R10 Exhibit 3, Page 1 Line 3	6,505,643,783
14	Revenue Requirement Year Prospective Component for <b>Residential Rider EE (cents per kWh)</b>	Line 14 / Line 15 * 100	<b>0.5552</b>
15	Total Revenue Requirement for Residential Rider EE	Line 5 + Line 12	\$ 48,552,591
16	Total Revenue Requirement for <b>Residential Rider EE (cents per kWh)</b>	Line 7 + Line 14	<b>0.7463</b>

**Non-Residential Billing Factors for Rider 10 True-Up Components**

16	Total Vintage Year 2014 True-Up EE Revenue Requirement - Vintage Year 2014 EE Participant	Year 2014 Exhibit 1 Line 27	\$ 71,247
17	Projected Vintage Year 2014 EE Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 1 Line 8	4,627,677,286
18	EE Revenue Requirement Vintage Year 2014 True-up <b>Non-Residential Rider EE (cents per kWh)</b>	Line 16/Line 17 * 100	<b>0.0015</b>
19	Total Vintage Year 2014 DSM True Up Revenue Requirement - Vintage Year 2014 DSM Participant	Year 2014 Exhibit 1 Line 40	\$ 55,263
20	Projected Vintage Year 2014 DSM Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 1 Line 9	5,562,575,682
21	DSM Revenue Requirement Vintage Year 2014 True-up <b>Non-Residential Rider EE (cents per kWh)</b>	Line 19/Line 20 * 100	<b>0.0010</b>
22	Total Vintage Year 2015 True-Up EE Revenue Requirement - Vintage Year 2015 EE Participant	Year 2015 Exhibit 1 Line 27	\$ 2,082,248
23	Projected Vintage Year 2015 EE Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 1 Line 10	4,757,192,872
24	EE Revenue Requirement Vintage Year 2015 True-up <b>Non-Residential Rider EE (cents per kWh)</b>	Line 22/Line 23 * 100	<b>0.0438</b>
25	Total Vintage Year 2015 DSM True Up Revenue Requirement - Vintage Year 2015 DSM Participant	Year 2015 Exhibit 1 Line 40	\$ 161,532
26	Projected Vintage Year 2015 DSM Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 1 Line 11	5,522,803,666
27	DSM Revenue Requirement Vintage Year 2015 True-up <b>Non-Residential Rider EE (cents per kWh)</b>	Line 25/Line 26 * 100	<b>0.0029</b>
28	Total Vintage Year 2016 True-Up EE Revenue Requirement - Vintage Year 2016 EE Participant	Year 2016 Exhibit 1 Line 27	\$ 795,693
29	Projected Vintage Year 2016 EE Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 1 Line 12	4,487,117,809
30	EE Revenue Requirement Vintage Year 2016 True-up <b>Non-Residential Rider EE (cents per kWh)</b>	Line 28/Line 29 * 100	<b>0.0177</b>
31	Total Vintage Year 2016 DSM True Up Revenue Requirement - Vintage Year 2016 DSM Participant	Year 2016 Exhibit 1 Line 40	\$ 33,773
32	Projected Vintage Year 2016 DSM Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 1 Line 13	5,440,778,436
33	DSM Revenue Requirement Vintage Year 2016 True-up <b>Non-Residential Rider EE (cents per kWh)</b>	Line 31/Line 32 * 100	<b>0.0006</b>
34	Total Vintage Year 2017 True-Up EE Revenue Requirement - Vintage Year 2017 EE Participant	Year 2017 Exhibit 1 Line 27	\$ 24,402,806
35	Projected Vintage Year 2017 EE Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 1 Line 14	4,360,626,235
36	EE Revenue Requirement Vintage Year 2017 True-up <b>Non-Residential Rider EE (cents per kWh)</b>	Line 34/Line 35 * 100	<b>0.5596</b>
37	Total Vintage Year 2017 DSM True Up Revenue Requirement - Vintage Year 2017 DSM Participant	Year 2017 Exhibit 1 Line 40	\$ 697,903
38	Projected Vintage Year 2017 DSM Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 1 Line 15	5,440,778,436
39	DSM Revenue Requirement Vintage Year 2017 True-up <b>Non-Residential Rider EE (cents per kWh)</b>	Line 37/Line 38 * 100	<b>0.0128</b>

**Non-Residential Billing Factors for Rider 10 Prospective Components**

37A	Total Vintage Year 2016 Prospective EE Revenue Requirement - Vintage Year 2016 EE Participant	Year 2016 Exhibit 1, Line 27	\$ 1,806,744
38A	Projected Vintage Year 2016 EE Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 2 Line 12	4,487,117,809
39A	EE Revenue Requirement Vintage Year 2016 Lost Revenues <b>Non-Residential Rider EE (cents per kWh)</b>	Line 40/Line 41 * 100	<b>0.0403</b>
40	Total Vintage Year 2017 Prospective EE Revenue Requirement - Vintage Year 2017 EE Participant	Year 2017 Exhibit 1, Line 27	\$ 5,864,726
41	Projected Vintage Year 2017 EE Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 2 Line 14	4,360,626,235
42	EE Revenue Requirement Vintage Year 2017 Lost Revenues <b>Non-Residential Rider EE (cents per kWh)</b>	Line 40/Line 41 * 100	<b>0.1345</b>
43	Total Vintage Year 2018 Prospective EE Revenue Requirement - Vintage Year 2018 EE Participant	Year 2018 Exhibit 1, Pg. 1, Line 6	\$ 5,435,606
44	Projected Vintage Year 2018 EE Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 2 Line 16	4,288,473,998
45	EE Revenue Requirement Vintage Year 2018 Lost Revenues <b>Non-Residential Rider EE (cents per kWh)</b>	Line 43/Line 44 * 100	<b>0.1267</b>
46	Total Vintage Year 2018 Prospective DSM Revenue Requirement - Vintage Year 2018 DSM Participant	Year 2018 Exhibit 1, Pg. 1, Line 9	313,603
47	Projected Vintage Year 2018 EE Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 2 Line 17	5,376,159,681
48	DSM Revenue Requirement Vintage Year 2018 <b>Non-Residential Rider EE (cents per kWh)</b>	Line 46/Line 47 * 100	<b>0.0058</b>

AMENDED Exhibit A, page 2

47	Total Vintage Year 2019 Prospective EE Revenue Requirement - Vintage Year 2019 EE Participant	Year 2019 Exhibit 1, Pg. 2, Line 7	\$	22,270,253
48	Projected Vintage Year 2019 EE Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 2 Line 18		4,288,473,998
49	EE Revenue Requirement Vintage Year 2019 Program Costs and Lost Revenues <b>Non-Residential Rider EE (cents per kWh)</b>	Line 47/Line 48 * 100		<b>0.5193</b>
50	Total Vintage Year 2019 Prospective DSM Revenue Requirement - Vintage Year 2019 DSM Participant	Year 2019 Exhibit 1, Pg. 2, Line 16	\$	7,209,874
51	Projected Vintage Year 2019 DSM Participants SC Non-Residential Sales (kwh) for rate period	R10 Exhibit 3, Page 2 Line 19		5,376,159,681
52	DSM Revenue Requirement Vintage Year 2019 Program Costs <b>Non-Residential Rider EE (cents per kWh)</b>	Line 50/Line 51 * 100		<b>0.1341</b>
<u>Total costs to be recovered in Rider 9 from Non-Residential Customers</u>				
53	Total Vintage Year 2014 True-Up EE Revenue Requirement - Vintage Year 2014 EE Participant	Year 2014 Exhibit 1 Line 27		71,247
54	Total Vintage Year 2014 DSM True Up Revenue Requirement - Vintage Year 2014 DSM Participant	Year 2014 Exhibit 1 Line 40		55,263
55	Total Vintage Year 2015 True-Up EE Revenue Requirement - Vintage Year 2015 EE Participant	Year 2015 Exhibit 1 Line 27		2,082,248
56	Total Vintage Year 2015 DSM True Up Revenue Requirement - Vintage Year 2015 DSM Participant	Year 2015 Exhibit 1 Line 40		161,532
57	Total Vintage Year 2016 True-Up EE Revenue Requirement - Vintage Year 2016 EE Participant	Year 2016 Exhibit 1 Line 27		795,693
58	Total Vintage Year 2016 DSM True Up Revenue Requirement - Vintage Year 2016 DSM Participant	Year 2016 Exhibit 1 Line 40		33,773
59	Total Vintage Year 2017 True-Up EE Revenue Requirement - Vintage Year 2017 EE Participant	Year 2017 Exhibit 1 Line 27		24,402,806
60	Total Vintage Year 2017 DSM True Up Revenue Requirement - Vintage Year 2017 DSM Participant	Year 2017 Exhibit 1 Line 40		697,903
60A	Total Vintage Year 2016 Prospective EE Revenue Requirement - Vintage Year 2016 EE Participant	Year 2016 Exhibit 1, Line 27		1,806,744
61	Total Vintage Year 2017 Prospective EE Revenue Requirement - Vintage Year 2017 EE Participant	Year 2017 Exhibit 1, Line 27		5,864,726
62	Total Vintage Year 2018 Prospective EE Revenue Requirement - Vintage Year 2018 EE Participant	Year 2018 Exhibit 1, Pg. 1, Line 6		5,435,606
63	Total Vintage Year 2018 Prospective DSM Revenue Requirement - Vintage Year 2018 DSM Participant	Year 2018 Exhibit 1, Pg. 1, Line 9		313,603
64	Total Vintage Year 2019 Prospective EE Revenue Requirement - Vintage Year 2019 EE Participant	Year 2019 Exhibit 1, Pg. 2, Line 16		22,270,253
65	Total Vintage Year 2019 Prospective DSM Revenue Requirement - Vintage Year 2019 DSM Participant	Year 2019 Exhibit 1, Pg. 2, Line 16		7,209,874
66	Total Non-Residential Revenue Requirements			<b>71,201,272</b>

Year 2014 Exhibit 1, as filed March 2, 2018

Duke Energy Carolinas  
For the period January 1, 2014 - December 31, 2014  
Docket No. 2018-XX-E  
Calculation of Year 2014 True up of Shared Savings, Y1, Y2, Y3 and Y4 Lost Revenues

Residential Energy Efficiency Programs

Line		Rider 7 Revenue Requirement Year 2014 as approved	Rider 6 Estimate of Year 2 Lost Revenue	Rider 7 Estimate of Year 3 Lost Revenues	True-up to be Collected in Rider 8	Rider 8 Estimate of Year 4 Lost Revenues	True up to be Collected in Rider 9	True-Up to be Collected in Rider 10	Total Year 2014	
1	Residential EE Program Cost	\$ 10,155,146	Year 2014 Exh 2 (B * D)		\$ (0)			-	\$ 10,155,146	<sup>1</sup>
2	Residential EE Earned Utility Incentive	1,816,721	Year 2014 Exh 2 (C * D)		32,481		100	\$ (100)	1,849,202	
3	Total EE Program Cost and Incentive Components	11,971,867	Year 2014 Exh 2 Line 10		32,481		100	(100)	12,004,348	<sup>1,2</sup>
4	Residential DSM Program Cost	3,123,902	Year 2014 Exh 2 (B * E)		0			-	3,123,902	
5	Residential DSM Earned Utility Incentive	943,582	Year 2014 Exh 2 (C * E)		(7,397)			-	936,185	
6	Total DSM Program Cost and Incentive Components	4,067,484	Year 2014 Exh 2 Line 11		(7,397)			-	4,060,087	<sup>2</sup>
7	Residential Existing DSM Program Revenue Requirement	673,781	Rider 7, Year 2014 Exh 3					-	673,781	
8	Total EE/DSM Program Cost and Incentive Components	16,713,132	Line 3 + Line 6+ Line 7		25,084			(100)	16,738,216	
9	Revenue-related taxes and regulatory fees factor				1.004493		1.004468	1.004487		
10	Total EE/DSM Program Cost and Incentive Revenue Requirement	16,788,469	Line 8 * Line 9		25,197			(100)	16,813,566	
11	Residential Net Lost Revenues	3,325,700	R10 Exh 1 page 1 Line 11	1,334,764	1,957,679	1,817,583	447,198	\$ (106,029)	11,618,837	<sup>3</sup>
12	Total Residential EE Revenue Requirement	20,114,169	Line 10 + Line 11	2,841,941	1,982,876	1,817,583	447,198	\$ (106,129)	28,432,402	
13	Revenues Collected (less interest)	15,850,391	R10 Exh 2 Line 1						28,492,544	
14	Residential EE Revenue Requirement	4,263,778	Line 12-Line 13						\$ (60,141)	
15	Estimated Interest to be Recovered	\$ 358,296	R10 Exh 4 page 1 Line 12						34,084	
16	Estimated Non-Residential EE Revenue Requirement True-Up with Interest	\$ 4,622,074	Line 14 + Line 15						\$ (26,057)	

See Exhibit A for rate

Non-Residential Energy Efficiency Programs

	Reference	Rider 7 Revenue Requirement Year 2014 as approved	Rider 6 Estimate of Year 2 Lost Revenue	Rider 7 Estimate of Year 3 Lost Revenues	True-up to be Collected in Rider 8	Rider 8 Estimate of Year 4 Lost Revenues	True up Collected in Rider 9	True-Up to be Collected in Rider 10	Year 2014	
17	Non- Residential EE Program Cost	\$ 5,447,376	Year 2014 Exh 2 (B * D) Line 24		\$ (0)			-	\$ 5,447,376	<sup>1</sup>
18	Non-Residential EE Earned Utility Incentive	2,852,657	Year 2014 Exh 2 (C * D) Line 24		13,233		16,769	(44,957)	2,837,702	
19	Total EE Program Cost and Incentive Components	8,300,033	Year 2014 Exh 2 Line 24		13,233		16,769	(44,957)	8,285,078	<sup>1,2</sup>
20	Revenue-related taxes and regulatory fees factor	1.004508			1.004493		1.004468	1.004487		
21	Total Non-Residential EE Program Cost and Incentive Revenue Requirements	8,337,450	Line 19 * Line 20		13,292			(45,158)	8,305,583	
22	Non-Residential Net Lost Revenues	825,574	R10 Exh 1 page 2 Line 25	1,615,418	1,583,800	814,387	136,668	3,632	5,056,669	<sup>3</sup>
23	Total Non-Residential EE Revenue Requirement	9,163,024	Line 21 + Line 22	1,615,418	1,583,800	814,387	136,668	(41,526)	13,362,252	
24	Revenues Collected (less interest)		R10 Exh 2 Line 10						13,332,094	
25	Non-Residential EE Revenue Requirement		Line 23 - Line 24						\$ 30,159	
26	Estimated Interest to be Recovered		R10 Exh 4 page 3 Line 12						41,088	
27	Estimated Non-Residential EE Revenue Requirement True-Up with Interest		Line 25 + line 26						\$ 71,247	
28	Projected SC Residential Sales (kWh)		R10 Exhibit 3 Page 1 Line 8						4,627,677,286	
29	SC Non-Residential EE billing factor (Cents/kWh)		Line 27 / Line 28 * 100						0.0015	

Non- Residential DSM Programs

		Year 2014 Revenue Requirement as Approved in Rider 9	True up	Year 2014 Revenue Requirement True up	
30	Non- Residential DSM Program Cost	\$ 4,554,210	\$ (0)	\$ 4,554,210	
31	Non-Residential DSM Earned Utility Incentive	1,364,826	(0)	1,364,826	
32	Total DSM Program Cost and Incentive Components	5,919,036	(0)	5,919,036	<sup>2</sup>
33	Non-Residential Existing DSM Program Revenue Requirement	982,783	-	982,783	
34	Total DSM Revenue Requirement	6,901,819	(0)	6,901,819	
35	Revenue-related taxes and regulatory fees factor		1.004487		
36	Total Non-Residential DSM Program Cost and Incentive Revenue Requirements	6,932,995	(0)	6,932,995	
37	Revenues Collected (less interest)			6,884,582	
38	Non-Residential DSM Revenue Requirement			48,413	
39	Estimated Interest Due			6,850	
40	Estimated Non-Residential DSM Revenue Requirement True Up after Interest			\$ 55,263	
41	Projected SC Non-Residential Sales (kWh)			5,562,575,682	
42	SC Non-Residential DSM billing factor			0.0010	

<sup>1</sup> Please note that there were adjustments to ORS program costs as a result of the Rider 7 program cost audit. \$136,514 and \$5,692 program costs were disallowed for residential and non-residential, respectively. This total will no longer tie to Year 2014 Exhibit 2.

<sup>2</sup> Details outlining the change in the program cost and incentive component can be found in Year 2014 Exh 2.

<sup>3</sup> Updated lost revenues by year can be found in R10 Exh 1 page 1.

**Year 2014 Exhibit 2, as filed March 2, 2018**

**Duke Energy Carolinas**  
**For the Period January 1, 2014 - December 31, 2014**  
**Docket Number 2018-XX-E**  
**Load Impacts and Estimated Revenue Requirements, Excluding Lost Revenue by Program**

A										B		C= A + B		D		E = C * D									
Residential Programs										System kW Reduction - Summer Peak		System Energy Reduction (kWh)		System NPV of Avoided Cost		Total Cost		Earned Utility Incentive		System Cost Plus Incentive		SC Retail Kwh Sales Allocation Factor (Year 2014 Exhibit 3 Line 6)		SC Residential Revenue Requirement	
EE Programs																									
1 Appliance Recycling										709	5,100,458	\$ 1,752,715	\$ 1,512,066	\$ 27,675	\$ 1,539,741	26.97487%	\$ 415,343								
2 Energy Efficiency Education										735	6,991,608	5,052,883	1,956,496	356,084	2,312,580	26.97487%	623,815								
3 Energy Efficient Appliances and Devices										18,726	168,414,153	51,979,992	14,701,023	4,287,081	18,988,103	26.97487%	5,122,016								
4 HVAC Energy Efficiency										2,509	4,526,177	6,959,716	4,774,663	251,281	5,025,944	26.97487%	1,355,742								
5 Income Qualified Energy Efficiency and Weatherization Assistance										792	3,374,813	1,662,513	1,909,870		1,909,870	26.97487%	515,185								
6 Multi-Family Energy Efficiency										965	9,953,578	5,263,891	1,438,728	439,894	1,878,622	26.97487%	506,756								
7 Energy Assessments										1,312	10,599,335	12,723,705	3,595,650	1,049,726	4,645,376	26.97487%	1,253,084								
8 Total for Residential Conservation Programs										25,748	208,960,120	\$ 85,395,414	\$ 29,888,496	\$ 6,411,742	\$ 36,300,236		\$ 9,791,942								
9 My Home Energy Report (1)										39,424	146,011,689	\$ 12,121,111	\$ 8,264,278	443,536	8,707,814	26.97487%	2,348,921								
10 Total Residential Conservation and Behavioral Programs										65,172	354,971,809	\$ 97,516,525	38,152,772	\$ 6,855,279	\$ 45,008,051		\$ 12,140,862								
											</														

(1) My Home Energy Report impacts reflect cumulative capability as of end of vintage year, including impacts for participants from prior vintage.

(2) Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak

Year 2014 Exhibit 3, as filed March 2, 2018

**Duke Energy Carolinas**  
**For the Period January 1, 2014 - December 31, 2014**  
**Docket Number 2018-XX-E**  
**Allocation Factor Year 2014**

			<u>MWH</u>
<b>Sales Allocator - 2013</b>			
1	NC Retail MWH Sales, at Generation	Company Records	58,149,791
2	SC Retail MWH Sales (Excl. Greenwood), at Generation	Company Records	21,499,203
3	Total Retail, Excluding Greenwood, at Generation	Line 1 + Line 2	79,648,994
4	Greenwood Retail MWH Sales, at Generation	Company Records	51,874
5	Total Retail, including Greenwood, at Generation	Line 3 + Line 4	79,700,868
<b>Allocation 1 to state based on kWh sales</b>			
6	SC Retail	Line 2 / Line 5	<b>26.97487%</b>

Demand Allocators - 2013			NC MW	SC MW	Total MW
7	Residential	Company Records	5,051,778	1,491,798	6,543,576
8	Non Residential (SC - Excl. Greenwood)	Company Records	6,119,392	2,174,831	8,294,223
9	Greenwood	Company Records	-	11,201	11,201
10	Total	Line 7 + Line 8+ Line 9	11,171,170	3,677,830	14,849,000
11	Wholesale Peak Demand	Company Records			1,067,981
12	Total System Peak Demand	Line 10 + Line 11			15,916,981
Allocation 2 to state based on peak demand					
13	SC Retail, Excl. Greenwood	(Line 7, SC + Line 8, SC)/ Line 10 Total	24.69277%		
Allocation 3 SC res vs non-res Peak Demand to retail system peak					
14	SC Residential	Line 7,SC / Line 10 Total	10.04645%		
15	SC Non-residential	Line 8, SC / Line 10 Total	14.64631%		
Allocation 4 SC res vs non-res Peak Demand to retail system peak for Existing DSM					
16	SC Residential	Line 7,SC / Line 12 Total	9.37237%		
17	SC Non-residential	Line 8, SC / Line 12 Total	13.66359%		

Duke Energy Carolinas  
For the period January 1, 2015 - December 31, 2015  
Docket No. 2018-XX-E  
Calculation of Year 2015 True up of Shared Savings and Y1, Y2 and Y3 Lost Revenues and Estimate Y4 Lost Revenues

Residential Energy Efficiency Programs

Line			Rider 6 Year 2015 Estimate	Rider 7 Year 2 Lost Revenue Estimate	Rider 8 Year 3 Lost Revenue Estimate	True-up to be Collected in Rider 8	True-up to be Collected in Rider 9	Estimate of Year 4 Lost Revenue	True Up To be Collected in Rider 10	Year 2015
1	Residential EE Program Cost	Year 2015 Exh 2 (B * D)	\$ 11,501,369			\$ (1,186,566)	0		-	\$ 10,314,803
2	Residential EE Earned Utility Incentive	Year 2015 Exh 2 (C * D)	426,243			1,436,395	183,068		0	2,045,707
3	Total EE Program Cost and Incentive Components	Year 2015 Exh 2 Line 10	11,927,612			249,829	183,068		0	12,360,510
4	Residential DSM Program Cost	Year 2015 Exh 2 (B * E)	3,913,647			(883,234)	0		-	3,030,413
5	Residential DSM Earned Utility Incentive	Year 2015 Exh 2 (C * E)	1,037,481			(73,162)	(4,299)		(167)	959,853
6	Total DSM Program Cost and Incentive Components	Year 2015 Exh 2 Line 11	4,951,128			(956,396)	(4,299)		(167)	3,990,266
7	Residential Existing DSM Program Revenue Requirement	Rider 8 Year 2015 Exhibit 3 Line 3	734,223			(157,796)			-	576,427
8	Total EE/DSM Program Cost and Incentive Components	Line 3 + Line 6+ Line 7	17,612,963			(864,363)	178,769		(167)	16,927,203
9	Revenue-related taxes and regulatory fees factor		1.004517			1.004493	1.004493		1.004487	
10	Total EE Program Cost and Incentive Revenue Requirement	Line 8 * Line 9	17,692,521			(868,246)	179,573		(167)	17,003,680
11	Residential Net Lost Revenues	R10 Exh 1 page 1 Line 36	3,125,109	1,655,188	2,664,819	914,189	1,079,208	1,143,018	33,505	10,615,036
12	Total Residential EE Revenue Requirement	Line 10 + Line 11	20,817,630	1,655,188	2,664,819	45,942	1,258,781	1,143,018	33,338	27,618,716
13	Estimated Revenues Collected	R10 Exh 2 Line 2								27,477,391
14	Residential EE Revenue Requirement	Line 12 - Line 13								\$ 141,325
15	Estimated Interest to be Recovered	R10 Exh 4 page 3 Line 25								58,748
16	Estimated Residential EE/DSM Revenue Requirement True Up	Line 14 + Line 15								\$ 200,073

See Exhibit A for rate

Non-Residential Energy Efficiency Programs

		Reference	Rider 6 Year 2015 Estimate	Rider 7 Year 2 Lost Revenue Estimate	Rider 8 Year 3 Lost Revenue Estimate	True-up to be Collected in Rider 8	True-up to be Collected in Rider 9	Estimate of Year 4 Lost Revenue	True Up to be Collected in Rider 10	Year 2015
17	Non- Residential EE Program Cost	Year 2015 Exh 2 (B * D) Line 24	\$ 6,427,482			\$ 4,342,595	\$ (5)		0	\$ 10,770,072
18	Non-Residential EE Earned Utility Incentive	Year 2015 Exh 2 (C * D) Line 24	2,790,408			962,744	319,858		(229,135)	3,843,875
19	Total EE Program Cost and Incentive Components	Year 2015 Exh 2 Line 24	9,217,890			5,305,339	319,853		(229,135)	14,613,947
20	Revenue-related taxes and regulatory fees factor		1.004517			1.004493	1.004468		1.004487	
21	Total Non-Residential EE Program Cost and Incentive Revenue Requirements	Line 19 * Line 20	9,259,527			5,329,175	321,282		(230,163)	14,679,822
22	Non-Residential Net Lost Revenues	R10 Exh 1 page 2 Line 50	860,328	2,798,965	2,476,910	548,406	27,510	1,189,630	(25,649)	7,876,100
23	Total Non-Residential EE Revenue Requirement	Line 21 + Line 22	10,119,855	2,798,965	2,476,910	5,877,581	348,792	1,189,630	(255,812)	22,555,922
24	Estimated Revenues Collected	R10 Exh 2 Line 9								20,683,396
25	Non-Residential EE Revenue Requirement	Line 23 + Line 24								\$ 1,872,527
26	Estimated Interest to be Recovered	R10 Exh 4 page 3 Line 12								209,721
27	Estimated Non-Residential EE Revenue Requirement True-Up with Interest	Line 25 + line 26								\$ 2,082,248
28	Projected SC Residential Sales (kWh)	R10 Exhibit 3 Page 1 Line 10								4,757,192,872
29	SC Non-Residential EE billing factor (Cents/kWh)	Line 27 / Line 28 * 100								0.0438

Non- Residential DSM Programs

30	Non- Residential DSM Program Cost	Year 2015 Exh 2 (B * D) Line 26								
31	Non-Residential DSM Earned Utility Incentive	Year 2015 Exh 2 (C * D) Line 26								
32	Total DSM Program Cost and Incentive Components	Year 2015 Exh 2 Line 26								
33	Non- Residential Existing DSM Program Revenue Requirement	Rider 8 Year 2015 Exh 3 Line 3								
34	Total DSM Revenue Requirement	Line 32 + Line 33								
35	Revenue-related taxes and regulatory fees factor									
36	Total Non-Residential DSM Program Cost and Incentive Revenue Requirements	Line 34 * Line 35								
37	Estimated Revenues Collected	R10 Exhibit 2 Line 16								
38	Non-Residential DSM Revenue Requirement	Line 36 - Line 37								
39	Estimated Interest Due	R10 Exh 4 Page 3 Line 25								
40	Estimated Non-Residential DSM Revenue Requirement True Up after Interest	Line 38 + Line 39								
41	Projected SC Non-Residential Sales (kWh)	R10 Exhibit 3 Page 1 Line 11								
42	SC Non-Residential DSM billing factor	Line 40 / Line 41 * 100								

Year 2015 Revenue Requirement as Approved in Rider 9	True up to be Collected in Rider 10	Year 2015 Revenue Requirement True up
\$ 4,928,506	\$ (0)	\$ 4,928,506
1,561,327	(272)	1,561,055
6,489,833	(272)	6,489,561
937,471	-	937,471
7,427,304	(272)	7,427,032
	1.004487	
7,467,895	(273)	7,467,622
		7,324,453
		143,168
		18,364
		\$ 161,532
		5,522,803,666
		0.0029

<sup>1</sup> Details outlining the change in the program cost and incentive component can be found in Year 2015 Exh 2. All amounts disallowed in the R8 ORS audit have been reflected in both year 2015 Exh 2 and Year 2015 Exh 1.

<sup>2</sup> Updated lost revenues by year can be found in R10 Exh 1 page 2. Year 2015 has been updated with most recent participation. Year 4 lost Revenues are shown as an estimate. They will be trued up in Rider 11.



**Year 2015 Exhibit 2, as filed March 2, 2018**

**Duke Energy Carolinas**  
**For the Period January 1, 2015 - December 31, 2015**  
**Docket Number 2018-XX-E**  
**Load Impacts and Estimated Revenue Requirements, Excluding Lost Revenue by Program**

[illegible]

(1) My Home Energy Report impacts reflect cumulative capability as of end of vintage year, including impacts for participants from prior vintage.

(2) Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak

Year 2015 Exhibit 3, as filed March 2, 2018

**Duke Energy Carolinas**  
**For the Period January 1, 2015 - December 31, 2015**  
**Docket Number 2018-XX-E**  
**Allocation Factor Year 2015**

			MWH		
Sales Allocator - 2014					
1	NC Retail MWH Sales, at Generation	Company Records	59,567,575		
2	SC Retail MWH Sales (Excl. Greenwood), at Generation	Company Records	22,026,080		
3	Total Retail, Excluding Greenwood, at Generation	Line 1 + Line 2	81,593,655		
4	Greenwood Retail MWH Sales, at Generation	Company Records	54,449		
5	Total Retail, including Greenwood, at Generation	Line 3 + Line 4	81,648,104		
Allocation 1 to state based on kWh sales					
6	SC Retail	Line 2 / Line 5	26.97684%		
			NC MW	SC MW	Total MW
7	Residential	Company Records	4,994,057	1,459,126	6,453,183
8	Non Residential (SC - Excl. Greenwood)	Company Records	6,518,371	2,373,045	8,891,416
9	Greenwood	Company Records	-	11,401	11,401
10	Total	Line 7 + Line 8+ Line 9	11,512,428	3,843,572	15,356,000
11	Wholesale Peak Demand	Company Records			1,211,771
12	Total System Peak Demand	Line 10 + Line 11			16,567,771
Allocation 2 to state based on peak demand					
13	SC Retail, Excl. Greenwood	(Line 7, SC + Line 8, SC)/ Line 10 Total	24.95553%		
Allocation 3 SC res vs non-res Peak Demand to retail system peak					
14	SC Residential	Line 7,SC / Line 10 Total	9.50199%		
15	SC Non-residential	Line 8, SC / Line 10 Total	15.45354%		
Allocation 4 SC res vs non-res Peak Demand to retail system peak for Existing DSM					
16	SC Residential	Line 7,SC / Line 12 Total	8.80701%		
17	SC Non-residential	Line 8, SC / Line 12 Total	14.32326%		

AMENDED Year 2016 Exhibit 1

Duke Energy Carolinas  
For the period January 1, 2016 - December 31, 2016  
Docket No. 2018-XX-E  
Calculation of Year 2016 True up of Shared Savings, Y1 and Y2 Lost Revenues and Estimate Y3 Lost Revenues

Residential Energy Efficiency Programs

Line		Rider 10 Year 4 Lost Revenue
1	Residential EE Program Cost	Year 2016 Exh 2 (B * D)
2	Residential EE Earned Utility Incentive	Year 2016 Exh 2 (C * D)
3	Total EE Program Cost and Incentive Components	Year 2016 Exh 2 Line 10
4	Residential DSM Program Cost	Year 2016 Exh 2 (B * E)
5	Residential DSM Earned Utility Incentive	Year 2016 Exh 2 (C * E)
6	Total DSM Program Cost and Incentive Components	Year 2016 Exh 2 Line 11
7	Residential Existing DSM Program Revenue Requirement Estimate	Year 2016 Exhibit 3 Line 3
8	Total EE/DSM Program Cost and Incentive Components	Line 3 + Line 6+ Line 7
9	Revenue-related taxes and regulatory fees factor	
10	Total EE Program Cost and Incentive Revenue Requirement	Line 8 * Line 9
11	Residential Net Lost Revenues	R10 Exh 1 page 3 Line 61 1,401,449
12	Total Residential EE Revenue Requirement	Line 10 + Line 11 1,401,449
13	Estimated Revenues Collected	R10 Exh 2 Line 2
14	Residential EE Revenue Requirement	Line 12 - Line 13 1,401,449
15	Estimated Interest to be Recovered	R10 Exh 4 page 2 Line 12
16	Estimated Residential EE/DSM Revenue Requirement True Up	Line 14 + Line 15 1,401,449

Rider 7 Year 2016 Estimate	Rider 8 Year 2 Lost Revenue Estimate	True-up to be Collected in Rider 9	Rider 9 Year 3 Lost Revenue Estimate	True Up to be Collected in Rider 10	Year 2016
\$ 11,482,088		\$ 3,178,895		\$ (0)	\$ 14,660,983
675,068		2,019,774		(22,174)	2,672,668
12,157,156		5,198,669		(22,174)	17,333,651
3,134,039		(116,010)		0	3,018,029
1,152,056		(58,775)		(9,614)	1,083,667
4,286,095		(174,785)		(9,614)	4,101,696
673,781		(86,148)		-	587,633
17,117,032		4,937,736		(31,788)	22,022,980
1,004517		1.004493		1.004487	
17,194,350		4,959,921		(31,931)	22,122,340
3,954,894	2,211,965	510,764	2,628,500	361,246	9,667,369
21,149,244	2,211,965	5,470,685	2,628,500	329,315	31,789,709
					\$ 31,342,186
					\$ 447,523
					237,555
					\$ 685,078

See Exhibit A for rate

Non-Residential Energy Efficiency Programs

	Reference	Rider 10 Year 4 Lost Revenue
17	Non- Residential EE Program Cost	Year 2016 Exh 2 (B * D) Line 24
18	Non-Residential EE Earned Utility Incentive	Year 2016 Exh 2 (C * D) Line 24
19	Total EE Program Cost and Incentive Components	Year 2016 Exh 2 Line 24
20	Revenue-related taxes and regulatory fees factor	
21	Total Non-Residential EE Program Cost and Incentive Revenue Requirements	Line 21 * Line 22
22	Non-Residential Net Lost Revenues	R10 Exh 1 page 3 Line 76 1,806,744
23	Total Non-Residential EE Revenue Requirement	Line 21 + Line 22 1,806,744
24	Estimated Revenues Collected	R10 Exh 2 Line 8
25	Non-Residential EE Revenue Requirement	Line 23 + Line 24 1,806,744
26	Estimated Interest to be Recovered	R10 Exh 4 page 5 Line 12
27	Estimated Non-Residential EE Revenue Requirement True-Up with Interest	Line 25 + line 26 1,806,744
28	Projected SC Residential Sales (kWh)	R10 Exhibit 3 Page 1 Line 21 4,487,117,809
29	SC Non-Residential EE billing factor (Cents/kWh)	Line 27 / Line 28 * 100 0.04027

Rider 7 Year 2016 Estimate	Rider 8 Year 2 Lost Revenue Estimate	True-up to be Collected in Rider 9	Rider 9 Year 3 Lost Revenue Estimate	True Up to be Collected in Rider 10	Year 2016
\$ 13,492,828		\$ 4,824,922		\$ (1)	\$ 18,317,749
4,203,327		1,374,876		(132,190)	5,446,013
17,696,155		6,199,798		(132,191)	23,763,762
1,004517		1.004493		1.004487	
17,776,089		6,227,654		(132,784)	23,870,958
1,511,303	3,672,465	301,230	3,365,361	(532,294)	8,318,065
19,287,392	3,672,465	6,528,884	3,365,361	(665,078)	32,189,023
					31,723,050
					\$ 465,973
					329,720
					\$ 795,693
					4,487,117,809
					0.0177

Non- Residential DSM Programs

30	Non- Residential DSM Program Cost	Year 2016 Exh 2 (B * D) Line 26
31	Non-Residential DSM Earned Utility Incentive	Year 2016 Exh 2 (C * D) Line 26
32	Total DSM Program Cost and Incentive Components	Year 2016 Exh 2 Line 26
33	Non- Residential Existing DSM Program Revenue Requirement Estimate	Year 2016 Exh 4 Line 3
34	Total DSM Revenue Requirement	Line 32 + Line 33
35	Revenue-related taxes and regulatory fees factor	
36	Total Non-Residential DSM Program Cost and Incentive Revenue Requirements	Line 34 * Line 35
37	Estimated Revenues Collected	R10 Exhibit 2 Line 17
38	Non-Residential DSM Revenue Requirement	Line 36 - Line 37
39	Estimated Interest Due	R10 Exh 4 Page 5 Line 25
40	Estimated Non-Residential DSM Revenue Requirement True Up after Interest	Line 38 + Line 39
41	Projected SC Non-Residential Sales (kWh)	R10 Exhibit 3 Page 1 Line 21
42	SC Non-Residential DSM billing factor	Line 40 / Line 41 * 100

Rider 7 Year 2016 Estimate	True-up to be Collected in Rider 9	True-up to be Collected in Rider 10	Year 2016 Revenue Requirement True up
\$ 4,568,988	\$ (417,013)	\$ (0)	\$ 4,151,975
1,679,535	(175,482)	(13,227)	1,490,826
6,248,523	(592,495)	(13,227)	5,642,801
982,277	(173,856)	-	808,421
7,230,800	(766,351)	(13,227)	6,451,222
1,004517	1.004493	1.004487	
7,263,462	(769,794)	(13,287)	6,480,381
			6,449,588
			30,792
			2,981
			\$ 33,773
			5,440,778,436
			0.0006

<sup>1</sup> Details outlining the change in the program cost and incentive component can be found in Year 2016 Exh 2.

<sup>2</sup> Updated lost revenues by year can be found in R10 Exh 1 page 3. Year 2017 has been updated with most recent participation. Year 3 Lost Revenues are shown as an estimate. They will be trued up in Rider 10. In addition, there is no projection for the final 1/2 year of lost revenue because for vintages prior to the test period filed in the rate case, lost revenue has been removed.

Duke Energy Carolinas									
For the Period January 1, 2016 - December 31, 2016									
Docket Number 2018-XX-E									
Load Impacts and Estimated Revenue Requirements, Excluding Lost Revenue by Program									
		A		B		C= A + B	D	E = C * D	
		System kW Reduction - Summer Peak	System Energy Reduction (kWh)	System NPV of Avoided Cost	Total Cost	Earned Utility Incentive	System Cost Plus Incentive	SC Retail Kwh Sales Allocation Factor (Year 2016 Exhibit 4 Line 6)	SC Residential Revenue Requirement
Residential Programs									
EE Programs									
1	Appliance Recycling	21	164,720	\$ 62,017	\$ (97,391)	\$ 18,332	\$ (79,059)	26.8397200%	\$ (21,219)
2	Energy Efficiency Education	1,512	6,441,283	3,907,380	2,121,607	205,364	2,326,971	26.8397200%	624,552
3	Energy Efficient Appliances and Devices	14,518	120,226,223	85,492,137	24,013,998	7,069,986	31,083,983	26.8397200%	8,342,854
4	HVAC Energy Efficiency	2,462	6,294,837	8,020,083	7,821,844	22,798	7,844,642	26.8397200%	2,105,480
5	Income Qualified Energy Efficiency and Weatherization Assistance	669	4,260,402	2,524,684	4,780,115	-	4,780,115	26.8397200%	1,282,970
6	Multi-Family Energy Efficiency	1,572	15,235,497	9,431,790	2,512,199	795,753	3,307,952	26.8397200%	887,845
7	Energy Assessments	1,070	7,389,091	7,555,385	2,672,325	561,552	3,233,877	26.8397200%	867,964
8	Total for Residential Conservation Programs	21,824	160,012,051	\$ 116,993,477	\$ 43,824,697	\$ 8,673,784	\$ 52,498,480		\$ 14,090,446
9	My Home Energy Report (1)	71,814	283,569,925	\$ 21,965,619	\$ 10,799,506	1,284,103	12,083,609	26.8397200%	3,243,207
10	Total Residential Conservation and Behavioral Programs	93,638	443,581,976	\$ 138,959,096	54,624,202	\$ 9,957,888	\$ 64,582,090		\$ 17,333,652
								SC Residential Peak Demand Allocation Factor (Year 2016, Exhibit 4 Line 14)	C * D
11	Total DSM Programs (2)	825,492	718,623	\$ 116,785,924	28,330,295	\$ 10,172,397	\$ 38,502,692	10.65301%	\$ 4,101,696
12	Total Residential Revenue Requirement								21,435,348
								</	

(1) My Home Energy Report impacts reflect cumulative capability as of end of vintage year, including impacts for participants from prior vintage.

(2) Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak

Year 2016 Exhibit 3, as filed March 2, 2018

**Duke Energy Carolinas**  
**For the Period January 1, 2016 - December 31, 2016**  
**Docket Number 2018-XX-E**  
**Allocation Factor Year 2016**

			MWH			
				NC MW	SC MW	Total MW
<b>Sales Allocator - 2015</b>						
1	NC Retail MWH Sales, at Generation	Company Records	60,762,752			
2	SC Retail MWH Sales (Excl. Greenwood), at Generation	Company Records	22,311,058			
3	Total Retail, Excluding Greenwood, at Generation	Line 1 + Line 2	83,073,810			
4	Greenwood Retail MWH Sales, at Generation	Company Records	53,197			
5	Total Retail, including Greenwood, at Generation	Line 3 + Line 4	83,127,007			
<b>Allocation 1 to state based on kWh sales</b>						
6	SC Retail	Line 2 / Line 5	<b>26.83972%</b>			
<b>Demand Allocators - 2015</b>						
7	Residential	Company Records	5,403,520	1,703,204	7,106,724	
8	Non Residential (SC - Excl. Greenwood)	Company Records	6,525,765	2,343,137	8,868,902	
9	Greenwood	Company Records	-	12,374	12,374	
10	Total	Line 7 + Line 8+ Line 9	11,929,285	4,058,715	15,988,000	
11	Wholesale Peak Demand	Company Records			1,458,384	
12	Total System Peak Demand	Line 10 + Line 11			17,446,384	
<b>Allocation 2 to state based on peak demand</b>						
13	SC Retail, Excl. Greenwood	(Line 7, SC + Line 8, SC)/ Line 10 Total	<b>25.30861%</b>			
<b>Allocation 3 SC res vs non-res Peak Demand to retail system peak</b>						
14	SC Residential	Line 7,SC / Line 10 Total	<b>10.65301%</b>			
15	SC Non-residential	Line 8, SC / Line 10 Total	<b>14.65560%</b>			
<b>Allocation 4 SC res vs non-res Peak Demand to retail system peak for Existing DSM</b>						
16	SC Residential	Line 7,SC / Line 12 Total	<b>9.76250%</b>			
17	SC Non-residential	Line 8, SC / Line 12 Total	<b>13.43050%</b>			

**AMENDED Year 2017 Exhibit 1**

## Duke Energy Carolinas

**For the period January 1, 2017 - December 31, 2017**

**Docket No. 2018-XX-E**

**Calculation of Year 2017 True up of Shared Savings and Y1 Lost Revenues and Estimate Y2 and Y3 Lost Revenues**

## Residential Energy Efficiency Programs

Line		
1	Residential EE Program Cost	Year 2017 Exh 2 (B * D)
2	Residential EE Earned Utility Incentive	Year 2017 Exh 2 (C * D)
3	Total EE Program Cost and Incentive Components	Year 2017 Exh 2 Line 10
4	Residential DSM Program Cost	Year 2017 Exh 2 (B * E)
5	Residential DSM Earned Utility Incentive	Year 2017 Exh 2 (C * E)
6	Total DSM Program Cost and Incentive Components	Year 2017 Exh 2 Line 11
7	Residential Existing DSM Program Revenue Requirement Estimate	Year 2017 Exhibit 3 Line 3
8	Total EE/DSM Program Cost and Incentive Components	Line 3 + Line 6+ Line 7
9	Revenue-related taxes and regulatory fees factor	
10	Total EE Program Cost and Incentive Revenue Requirement	Line 8 * Line 9
11	Residential Net Lost Revenues	R10 Exh 1 page 3 Line 87
12	Total Residential EE Revenue Requirement	Line 10 + Line 11
13	Estimated Revenues Collected	R10 Exh 2 Line 2
14	Residential EE Revenue Requirement	Line 12 - Line 13
15	Estimated Interest to be Recovered	R10 Exh 4 page 2 Line 12
16	Estimated Residential EE/DSM Revenue Requirement True Up	Line 14 + Line 15

Estimate of Year 3 Lost Revenues	
\$	3,175,509
	3,175,509
\$	3,175,509
\$	3,175,509

Rider 8	Rider 9 Year 2	True-up to be Collected	
Year 2017 Estimate	Lost Revenue Estimate	in Rider 10	Year 2017
\$ 12,383,092		\$ 5,273,485	\$ 17,656,577
1,384,934		2,008,972	3,393,906
13,768,026		7,282,457	21,050,483
2,997,324		251,290	3,248,614
1,117,352		68,938	1,186,290
4,114,676		320,228	4,434,904
576,427		22,800	599,227
18,459,129		7,625,485	26,084,614
1.004493		1.004487	
18,542,066		7,659,700	26,201,766
4,457,989	4,202,002	(197,107)	8,462,884
23,000,055	4,202,002	7,462,593	34,664,650
			24,025,903
			\$ 10,638,747
			934,494
			\$ 11,573,242

See Exhibit A for rate

### Non-Residential Energy Efficiency Programs

		Reference
17	Non- Residential EE Program Cost	Year 2017 Exh 2 (B * D) Line 24
18	Non-Residential EE Earned Utility Incentive	Year 2017 Exh 2 (C * D) Line 24
19	Total EE Program Cost and Incentive Components	Year 2017 Exh 2 Line 24
20	Revenue-related taxes and regulatory fees factor	
21	Total Non-Residential EE Program Cost and Incentive Revenue Requirements	Line 21 * Line 22
22	Non-Residential Net Lost Revenues	R10 Exh 1 page 3 Line 98
23	Total Non-Residential EE Revenue Requirement	Line 21 + Line 22
24	Estimated Revenues Collected	R10 Exh 2 Line 8
25	Non-Residential EE Revenue Requirement	Line 23 + Line 24
26	Estimated Interest to be Recovered	R10 Exh 4 page 5 Line 12
27	Estimated Non-Residential EE Revenue Requirement True-Up with Interest	Line 25 + line 26
28	Projected SC Residential Sales (kWh)	R10 Exhibit 3 Page 1 Line 21
29	<b>SC Non-Residential EE billing factor (Cents/kWh)</b>	<b>Line 27 / Line 28 * 100</b>

Estimate of Year 3 Lost Revenues	
\$	5,864,726
	5,864,726
\$	5,864,726
\$	5,864,726
	4,360,626,235
	<b>0.1345</b>

Rider 8	Rider 9 Year 2	True-up to be Collected	
Year 2017 Estimate	Lost Revenue Estimate	in Rider 10	Year 2017
\$ 14,343,825		\$ 12,031,371	\$ 26,375,196
4,131,457		3,136,348	7,267,805
18,475,282		15,167,719	33,643,001
1.004493		1.004487	
18,558,291		15,235,776	33,794,068
2,062,368	9,466,867	(2,154,791)	9,374,444
20,620,659	9,466,867	13,080,985	43,168,512
			20,706,802
			\$ 22,461,710
			1,941,096
			\$ 24,402,806
			4,360,626,235
			0.5596

### Non- Residential DSM Programs

30	Non- Residential DSM Program Cost	Year 2017 Exh 2 (B * D) Line 26
31	Non-Residential DSM Earned Utility Incentive	Year 2017 Exh 2 (C * D) Line 26
32	Total DSM Program Cost and Incentive Components	Year 2017 Exh 2 Line 26
33	Non- Residential Existing DSM Program Revenue Requirement Estimate	Year 2017 Exh 4 Line 3
34	Total DSM Revenue Requirement	Line 32 + Line 33
35	Revenue-related taxes and regulatory fees factor	
36	Total Non-Residential DSM Program Cost and Incentive Revenue Requirements	Line 34 * Line 35
37	Estimated Revenues Collected	R10 Exhibit 2 Line 17
38	Non-Residential DSM Revenue Requirement	Line 36 - Line 37
39	Estimated Interest Due	R10 Exh 4 Page 5 Line 25
40	Estimated Non-Residential DSM Revenue Requirement True Up after Interest	Line 38 + Line 39
41	Projected SC Non-Residential Sales (kWh)	R10 Exhibit 3 Page 1 Line 21
42	<b>SC Non-Residential DSM billing factor</b>	<b>Line 40 / Line 41 * 100</b>

Rider 8	True-up to be Collected	
Year 2017 Estimate	in Rider 10	Year 2017 Revenue Requirement True up
\$ 4,874,691	\$ (377,480)	\$ 4,497,211
1,817,203	(174,966)	1,642,237
6,691,894	(552,446)	6,139,448
937,471	(107,933)	829,538
7,629,365	(660,379)	6,968,986
1.004517	1.004487	
7,663,827	(663,343)	7,000,484
		6,368,636
		631,848
		66,055
		\$ 697,903
		5,440,778,436
		<b>0.0128</b>

<sup>1</sup> Details outlining the change in the program cost and incentive component can be found in Year 2016 Exh 2.

<sup>2</sup> Updated lost revenues by year can be found in R9 Exh 1 page 3. Year 2016 has been updated with most recent participation. Year 2 Lost Revenues are shown as an estimate. They will be trued up in Rider 10.

Duke Energy Carolinas For the Period January 1, 2017 - December 31, 2017 Docket Number 2018-XX-E Load Impacts and Estimated Revenue Requirements, Excluding Lost Revenue by Program								Year 2017 Exhibit 2, as filed March 2, 2018	
		A		B		C= A + B		D	E = C * D
Residential Programs		System kW Reduction - Summer Peak	System Energy Reduction (kWh)	System NPV of Avoided Cost	Total Cost	Earned Utility Incentive	System Cost Plus Incentive	SC Retail Kwh Sales Allocation Factor (Year 2017 Exhibit 4 Line 6)	SC Residential Revenue Requirement
EE Programs									
1 Appliance Recycling		-	-	\$ -	\$ 5,297	\$ (609)	\$ 4,688	27.1285500%	\$ 1,272
2 Energy Efficiency Education		1,393	5,932,086	3,796,779	2,072,267	198,319	2,270,586	27.1285500%	615,977
3 Energy Efficient Appliances and Devices		23,860	141,300,087	110,247,620	30,275,929	9,196,744	39,472,673	27.1285500%	10,708,364
4 Residential – Smart Saver Energy Efficiency Program		2,478	8,545,577	9,420,772	7,387,527	233,823	7,621,350	27.1285500%	2,067,562
5 Income Qualified Energy Efficiency and Weatherization Assistance		782	4,951,901	2,885,226	5,493,401	-	5,493,401	27.1285500%	1,490,281
6 Multi-Family Energy Efficiency		1,918	19,056,155	13,883,086	3,161,750	1,232,954	4,394,703	27.1285500%	1,192,219
7 Energy Assessments		1,274	8,131,752	7,624,494	2,902,310	543,051	3,445,362	27.1285500%	934,677
8 Total for Residential Conservation Programs		31,706	187,917,557	\$ 147,857,978	\$ 51,298,482	\$ 11,404,282	\$ 62,702,763		\$ 17,010,352
9 My Home Energy Report (1)		79,070	311,368,855	\$ 23,405,321	\$ 13,786,373	1,106,179	14,892,552	27.1285500%	4,040,134
10 Total Residential Conservation and Behavioral Programs		110,776	499,286,413	\$ 171,263,299	65,084,855	\$ 12,510,462	\$ 77,595,317		\$ 21,050,484
								SC Residential Peak Demand Allocation Factor (Year 2017, Exhibit 4 Line 14)	C * D
11 Total DSM Programs (2)	846,941	2,943,906	\$ 124,226,016	29,752,076	\$ 10,864,503	\$ 40,616,579	10.91895%	\$ 4,434,904	
12 Total Residential Revenue Requirement									25,485,388
Non-Residential Programs		System kW Reduction - Summer Peak	System Energy Reduction (kWh)	System NPV of Avoided Cost	Total Cost	Earned Utility Incentive	System Cost Plus Incentive	SC Retail Kwh Sales Allocation Factor (Year 2017 Exhibit 4 Line 6)	SC Residential Revenue Requirement
EE Programs									
13 Non Residential Smart Saver Customer Technical Assessments	1,604	15,633,234	\$ 10,547,656	\$ 2,135,919	\$ 967,350	\$ 3,103,269	27.1285500%	\$ 841,872	
14 Non Residential Smart Saver Custom	6,222	41,833,254	37,011,563	7,280,168	3,419,110	10,699,278	27.1285500%	2,902,559	
15 Non Residential Smart Saver Energy Efficient Food Service Products	226	2,257,329	1,627,224	305,687	151,977	457,663	27.1285500%	124,157	
16 Non Residential Smart Saver Energy Efficient HVAC Products	1,031	3,382,708	3,646,911	1,557,542	240,277	1,797,819	27.1285500%	487,722	
17 Non Residential Smart Saver Energy Efficient Lighting Products	32,963	229,728,893	200,847,916	66,551,086	15,444,135	81,995,221	27.1285500%	22,244,115	
18 Non Residential Energy Efficient Pumps and Drives	496	3,470,697	2,298,269	527,539	203,634	731,173	27.1285500%	198,357	
19 Non Residential Energy Efficient ITEE	-	3,330	590	60,885	(6,934)	53,951	27.1285500%	14,636	
20 Non Residential Energy Efficient Process Equipment Products	87	577,560	462,125	161,937	34,522	196,458	27.1285500%	53,296	
21 Non Residential Smart Saver Performance Incentive	3	12,810	9,766	313,256	(34,901)	278,354	27.1285500%	75,514	
22 Small Business Energy Saver	19,726	97,516,700	72,487,959	17,318,666	6,344,469	23,663,135	27.1285500%	6,419,465	
23 Smart Energy in Offices	2,138	10,272,154	1,115,495	884,119	26,608	910,727	27.1285500%	247,067	
24 Business Energy Report	3	42,398	722	126,219	-	126,219	27.1285500%	34,241	
25 Total for Non-Residential Conservation Programs	64,499	404,731,067	\$ 330,056,195	97,223,022	\$ 26,790,247	\$ 124,013,269		\$ 33,643,001	
								SC Residential Peak Demand Allocation Factor (Year 2017, Exhibit 4 Line 15)	C * D
26 Total DSM Programs	846,941	2,943,906	\$ 124,226,016	\$ 29,752,076	10,864,503	\$ 40,616,579	15.11562%	\$ 6,139,448	
27 Total Non-Residential Revenue Requirement									39,782,448
								SC Residential Peak Demand Allocation Factor (Year 2017, Exhibit 3 Line 13)	C * D
28 Power Manager (Residential)	501,118	-	\$ 72,328,478	\$ 13,991,587	6,708,742	20,700,330			
29 EnergyWise for Business (Non-Residential)	5,453	2,943,906	2,770,718	2,475,377	33,964	2,509,341			
30 Power Share Call Option (Non-Residential)	-	-	-	-	-	-			
31 Power Share (Non-Residential)	340,369	-	49,126,820	13,285,111	4,121,797	17,406,908			
32 Total DSM	846,941	2,943,906	\$ 124,226,016	\$ 29,752,076	\$ 10,864,503	40,616,580	26.03457%	\$ 10,574,352	
33 Total All Programs	1,022,216	906,961,386	625,545,510	192,059,952	50,165,212	242,225,165		65,267,836	

(1) My Home Energy Report impacts reflect cumulative capability as of end of vintage year, including impacts for participants from prior vintage.  
(2) Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak

Year 2017 Exhibit 3, as filed March 2, 2018

**Duke Energy Carolinas**  
**For the Period January 1, 2017 - December 31, 2017**  
**Docket Number 2018-XX-E**  
**Actual Existing DSM Program Costs - Year 2017**

		Year 2017	
1 Actual total IS/SG credits to be paid for native load programs	Line 9	\$ 6,051,059	
		Residential	Non-residential
2 SC retail allocation factor - system peak demand	Year 2017 Exhibit 4, Line 16, 17	9.90284%	13.70897%
3 SC retail share IS/SG program costs	Line 1 * Line 2	\$ 599,227	\$ 829,538

PROGRAM	Jan - Dec 2017 Credits Paid
4 INTERRUPTIBLE SERVICE CREDITS	\$ 4,153,482
5 STANDBY GENERATOR PAYMENTS	356,590
6 WHOLESALE A/C LOAD CONTROL CREDITS	343,904
7 WHOLESALE INTERRUPTIBLE SERVICE CREDITS	1,196,147
8 Wholesale Penalties	935
9 <b>TOTAL CREDITS</b>	<u>\$ 6,051,059</u>

Note: Regulatory fee to be added to total revenue requirement on Vintage Year Exhibit.



Year 2017 Exhibit 4, as filed March 2, 2018

**Duke Energy Carolinas**  
**For the Period January 1, 2017 - December 31, 2017**  
**Docket Number 2018-XX-E**  
**Allocation Factor Year 2017**

			MWH		
Sales Allocator - 2016					
1	NC Retail MWH Sales, at Generation	Company Records	60,219,051		
2	SC Retail MWH Sales (Excl. Greenwood), at Generation	Company Records	22,437,625		
3	Total Retail, Excluding Greenwood, at Generation	Line 1 + Line 2	82,656,676		
4	Greenwood Retail MWH Sales, at Generation	Company Records	51,859		
5	Total Retail, including Greenwood, at Generation	Line 3 + Line 4	82,708,535		
Allocation 1 to state based on kWh sales					
6	SC Retail	Line 2 / Line 5	27.12855%		
			NC MW	SC MW	Total MW
7	Residential	Company Records	5,545,784	1,791,145	7,336,929
8	Non Residential (SC - Excl. Greenwood)	Company Records	6,573,854	2,479,566	9,053,420
9	Greenwood	Company Records	-	13,651	13,651
10	Total	Line 7 + Line 8+ Line 9	12,119,638	4,284,362	16,404,000
11	Wholesale Peak Demand	Company Records			1,683,179
12	Total System Peak Demand	Line 10 + Line 11			18,087,179
Allocation 2 to state based on peak demand					
13	SC Retail, Excl. Greenwood	(Line 7, SC + Line 8, SC)/ Line 10 Total	26.03457%		
Allocation 3 SC res vs non-res Peak Demand to retail system peak					
14	SC Residential	Line 7,SC / Line 10 Total	10.91895%		
15	SC Non-residential	Line 8, SC / Line 10 Total	15.11562%		
Allocation 4 SC res vs non-res Peak Demand to retail system peak for Existing DSM					
16	SC Residential	Line 7,SC / Line 12 Total	9.90284%		
17	SC Non-residential	Line 8, SC / Line 12 Total	13.70897%		

Year 2017 Exhibit 5, as filed March 2, 2018

**Duke Energy Carolinas**  
**For the Period January 1, 2017 - December 31, 2017**  
**Docket Number 2018-xx-E**  
**Actual Program Costs - Year 2017**

	<b>System Costs</b> <b>Months of January 1,</b> <b>2017 - December 31,</b> <b>2017</b>	<b>Residential</b>	<b>Non-Residential</b>
Energy Efficiency (EE) Programs:			
1 My Home Energy Report	\$ 13,786,373	13,786,373	
2 Energy Assessments	2,902,310	2,902,310	
3 Residential – Smart \$aver Energy Efficiency Program	7,387,527	7,387,527	
4 Energy Efficient Appliances and Devices	30,275,929	30,275,929	
Income Qualified Energy Efficiency and Weatherization			
5 Assistance	5,493,401	5,493,401	
6 Multi-Family Energy Efficiency	3,161,750	3,161,750	
7 Appliance Recycle Program	5,297	5,297	
8 Energy Efficiency Education	2,072,267	2,072,267	
9 Nonresidential Smart Saver Performance Incentives	313,256		313,256
10 Smart Saver Custom Technical Assessments	2,135,919		2,135,919
11 Smart Saver Custom	7,280,168		7,280,168
12 Smart Saver Efficient Food Service Products	305,687		305,687
13 Smart Saver Efficient HVAC Products	1,557,542		1,557,542
14 Smart Saver Efficient Lighting Products	66,551,086		66,551,086
15 Nonresidential Energy Efficient Pumps and Drives	527,539		527,539
16 Nonresidential Energy Efficient ITEE	60,885		60,885
17 Nonresidential Energy Efficient Process Equipment Products	161,937		161,937
18 Small Business Energy Saver	17,318,666		17,318,666
19 Smart Energy in Offices	884,119		884,119
20 Business Energy Report	126,219		126,219
21 Subtotal EE Program Costs	\$ 162,307,878	\$ 65,084,856	\$ 97,223,022
Demand-Side Management (DSM) Programs:			
22 Power Manager	\$ 13,991,587	\$ 13,991,587	
23 EnergyWise for Business	2,475,377		2,475,377
24 Power Share	13,285,111		13,285,111
25 Subtotal DSM Program Costs	\$ 29,752,076	\$ 13,991,587	\$ 15,760,488
<b>26 Total EE &amp; DSM Program Costs - Year 2016</b>	<b>\$ 192,059,953</b>	<b>\$ 79,076,443</b>	<b>\$ 112,983,510</b>

Duke Energy Carolinas  
Changes to DSM/EE Cost Recovery Vintage 2017 True Up January 1, 2017 - December 31, 2017  
Changes from Prior Filing Due to Application of M&V and Participation  
System kWh and kW Impacts Net Free Riders at the Plant

Residential Programs

Program Name	Filed in Docket		Filed in Docket		Overall Variance		2016-92-E	2018-XXXX-E	Delta	Variance attributable to Participation		Variance attributable to Mix of Measures		Variance attributable to EM&V		Sum of Variances	
	2016-92-E		2018-XXXX-E														
	kWh	kW	kWh	kW	kWh	kW	System Participation		Participation	kWh	kW	kWh	kW	kWh	kW	kWh	kW
Appliance Recycling Program	-	-	-	-	-	-	-	-	1,535	-	-	-	-	-	-	-	-
Energy Efficiency Education Program for Schools	5,604,364	1,316	5,932,086	1,393	327,722	77	26,250	27,785	-	327,722	77	-	-	-	-	327,722	77
Energy Efficient Appliances and Devices	63,591,491	8,139	141,300,087	23,860	77,708,596	15,721	2,544,764	6,819,189	4,274,425	61,439,666	7,409	38,308,038	4,671	(22,039,109)	3,640	77,708,596	15,721
Residential – Smart Saver Energy Efficiency Program	-	-	8,545,577	2,478	8,545,577	2,478	-	27,311	27,311	-	-	8,545,577	2,478	-	-	8,545,577	2,478
Income Qualified Energy Efficiency and Weatherization Assistance	5,309,863	1,048	4,951,901	782	(357,962)	(266)	10,538	11,726	1,188	(538,363)	(13)	-	-	180,401	(253)	(357,962)	(266)
Multi-Family Energy Efficiency	12,687,532	1,190	19,056,155	1,918	6,368,623	729	186,948	356,003	169,055	(2,279,878)	(217)	8,648,501	946	-	-	6,368,623	729
Energy Assessments	7,923,133	981	8,131,752	1,274	208,618	293	8,038	52,546	44,508	-	-	208,618	293	-	-	208,618	293
My Home Energy Report	211,047,528	56,979	311,368,855	79,070	100,321,327	22,091	1,050,000	1,394,693	344,693	23,101,306	6,241	20,441,940	5,516	56,778,082	10,334	100,321,327	22,091
PowerManager	-	502,972	-	501,118	-	-	473,525	471,780	(1,745)	-	(1,854)	-	-	-	-	-	(1,854)
Residential Programs Total	306,163,911	572,625	499,286,413	611,894	193,122,502	39,269	4,300,063	9,161,033	4,860,970	82,050,453	11,643	76,152,674	13,905	34,919,374	13,721	193,122,502	39,269

Non-Residential Programs

Program Name	Filed in Docket		Filed in Docket		Overall Variance		2016-92-E	2018-XXXX-E	Delta	Variance attributable to Participation		Variance attributable to Mix of Measures		Variance attributable to EM&V		Sum of Variances	
	2016-92-E		2018-XXXX-E														
	kWh	kW	kWh	kW	kWh	kW	System Participation		Participation	kWh	kW	kWh	kW	kWh	kW	kWh	kW
Non Residential Smart Saver Custom Technical Assessments	13,280,913	1,516	15,684,406	1,623	2,403,493	106	10,760	7	(10,753)	-	-	2,403,493	106	-	-	2,403,493	106
Non Residential Smart Saver Custom	90,101,969	10,286	41,782,082	6,204	(48,319,887)	(4,082)	73,002	40,133	(32,869)	-	-	(48,319,887)	(4,082)	-	-	(48,319,887)	(4,082)
Energy Management Information Systems	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non Residential Smart Saver Energy Efficient Food Service Products	3,968,253	420	2,257,329	226	(1,710,925)	(195)	5,293	2,730	(2,563)	71,124	16	(1,884,089)	(227)	102,041	16	(1,710,925)	(195)
Non Residential Smart Saver Energy Efficient HVAC Products	6,253,763	2,791	3,382,708	1,031	(2,871,056)	(1,760)	121,841	3,016,407	2,894,566	722,995	(85)	(3,594,051)	(1,675)	-	-	(2,871,056)	(1,760)
Non Residential Smart Saver Energy Efficient Lighting Products	68,582,518	11,286	229,728,893	32,963	161,146,374	21,677	245,765	2,290,141	2,044,376	131,112,903	22,064	28,773,306	(336)	1,260,165	(51)	161,146,374	21,677
Non Residential Energy Efficient Pumps and Drives Products	4,745,697	599	3,470,697	496	(1,274,999)	(103)	4,347	4,361	14	464,688	15	-	-	(1,739,688)	(118)	(1,274,999)	(103)
Non Residential Energy Efficient ITEE	3,184,721	25	3,330	-	(3,181,391)	(25)	2,613	45	(2,568)	(50,144)	-	(3,131,247)	(25)	-	-	(3,181,391)	(25)
Non Residential Energy Efficient Process Equipment Products	564,086	131	577,560	87	13,474	(45)	1,509	8,936	7,427	170,159	41	200,454	27	(357,139)	(113)	13,474	(45)
Non Residential Smart Saver Performance Incentive	-	-	12,810	3	12,810	3	-	19	19	-	-	12,810	3	-	-	12,810	3
Smart Energy in Offices	42,174,681	8,778	10,272,154	2,138	(31,902,527)	(6,640)	48,421,359	26,824,711	(21,596,648)	(3,844,131)	(800)	(18,436,903)	(3,837)	(9,621,493)	(2,003)	(31,902,527)	(6,640)
Small Business Energy Saver	61,629,002	12,840	97,516,700	19,726	35,887,698	6,886	65,000,000	79,986,749	14,986,749	14,143,243	5,121	(31,069)	(6)	21,775,524	1,772	35,887,698	6,886
Business Energy Report	5,663,041	395	42,398	3	(5,620,643)	(392)	15,634	109	(15,525)	(5,620,643)	(392)	-	-	-	-	(5,620,643)	(392)
EnergyWise for Business	1,757,389	8,966	2,943,906	5,453	1,186,517	(3,512)	3,342	8,537	5,195	4,905,392	7,891	-	-	(3,718,875)	(11,403)	1,186,517	(3,512)
PowerShare CallOption	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PowerShare	-	371,367	-	340,369	-	(30,998)	349,625	320,442	(29,184)	-	(30,998)	-	-	-	-	-	(30,998)
Non-Residential Programs Total	301,906,034	429,400	407,674,973	410,321	105,768,939	(19,078)	114,255,090	112,503,327	(1,751,764)	142,075,586	2,873	(44,007,182)	(10,051)	7,700,535	(11,900)	105,768,939	(19,078)
Total Residential and Non-Residential Programs	608,069,945	1,002,025	906,961,386	1,022,216	298,891,440	20,191	118,555,154	121,664,360	3,109,206	224,126,039	14,516	32,145,492	3,854	42,619,909	1,821	298,891,440	20,191

NOTE - The actual per unit impacts are reflective of the following EM&V reports:

Program Name As Filed	Docket	Report Reference	Effective Date
Smart Saver® for Residential Customers	2013-298-E	Stevie Exhibit A - Carolinas - Res S\$ EE Products - EMV - Sept 28 2012	3/1/2012
	2013-298-E	Stevie Exhibit J - Carolinas - Prop Mgr CFL Prg-EMV - Feb 18 2013	10/1/2012
Residential Energy Assessments	2013-298-E	Stevie Exhibit G - Carolinas - Res Energy Assess HEHC-EMV-Feb 19 2013	12/1/2012
Smart Saver® for Residential Customers	2013-298-E	Stevie Exhibit E - Carolinas - Res HVAC-EMV- February 28 2013	10/1/2012
Residential Energy Assessments	2014-334-E	Process and Impact Evaluation of the Residential Energy Assessments Program (Personalized Energy Report®) in the Carolina System	9/1/2012
Smart Saver® for Non-Residential Customers Lighting	2013-298-E	Stevie Exhibit I - Carolinas - Final Non-Res Smart Saver-EMV- April 5 2013	10/1/2012
PowerManager	2014-334-E	Impact Evaluation and Review of the 2012 Power Manager® Program in the Carolina System (June 11, 2013)	1/1/2012
PowerShare	2014-334-E	Impact Evaluation and Review of the 2012 PowerShare® Program in the Carolina System (June 11, 2013)	1/1/2012
Energy Efficiency Education Program for Schools	2014-334-E	Impact Evaluation of the Energy Efficiency for Schools Program (The National Theatre for Children (NTC)) in the Carolinas System (August 21, 2013)	9/1/2012
Non-Residential Custom Program	2014-334-E	Smart Saver Custom - Final Process and Impact Evaluation Report - Nov 20 2013	1/1/2013
My Home Energy Report	2014-334-E	Process and Impact Evaluation of the My Home Energy Report (MyHER) Program in the Carolina System - Feb 20, 2014	11/1/2013
Smart Energy Now	2014-334-E	Impact Evaluation of the Smart Energy Now Program (NC) (Pilot) - Feb 21, 2014	1/1/2011
Appliance Recycling	2014-334-E	Process and Impact Evaluation of Duke Energy's Residential Appliance Recycling Program (ARP) in the Carolina System - Apr 25, 2014	1/1/2012
Income Qualified Energy Efficiency: Neighborhoods	2015-89-E	Process and Impact Evaluation of the 2013-2014 Residential Neighborhood Program in the Carolina System (November 14, 2014)	1/1/2012
Energy Efficient Appliances and Devices: Specialty Bulbs	2015-89-E	Process and Impact Evaluation of the Residential Energy Efficient Appliance and Devices: Lighting - Specialty Bulbs Program in the Carolina System (November 19, 2014)	4/1/2013
HVAC Energy Efficiency: Tune & Seal	2015-89-E	Evaluation of the Residential Smart Saver® Additional Measures Program in the Carolina System (December 10, 2014)	8/1/2012
Multi-Family Energy Efficiency	2016-92-E	Exhibit 9 - Multifamily Energy Efficiency Program; Evaluation, Measurement, and Verification for Duke Energy Carolinas (November 3, 2015)	5/1/2014
Energy Efficient Appliances and Devices	2016-92-E	Exhibit 9 - Save Energy and Water Kit Program Evaluation, Measurement, & Verification for Duke Energy Carolinas (November 18, 2015)	5/1/2014
Income Qualified EE and Weatherization Program	2017-65-E	Exhibit 9 – Duke Energy Carolinas 2015 Residential Neighborhoods Program Final Evaluation Report (December 5, 2016)	1/1/2016
Multi-Family Energy Efficiency	2017-65-E	Exhibit 9 – EM&V Report for the Duke Energy Multifamily Energy Efficiency Program (October 4, 2016)	3/1/2016
Non Residential Smart Saver Energy Efficient Food Service Products	2017-65-E	Exhibit 9F – Duke Energy Carolinas Smart Saver® Prescriptive Incentive Program (July 17, 2016)	8/1/2015
Non Residential Smart Saver Energy Efficient HVAC Products	2017-65-E	Exhibit 9F – Duke Energy Carolinas Smart Saver® Prescriptive Incentive Program (July 17, 2016)	8/1/2015
Non Residential Smart Saver Energy Efficient Lighting Products	2017-65-E	Exhibit 9F – Duke Energy Carolinas Smart Saver® Prescriptive Incentive Program (July 17, 2016)	8/1/2015
Non Residential Energy Efficient Process Equipment Products	2017-65-E	Exhibit 9F – Duke Energy Carolinas Smart Saver® Prescriptive Incentive Program (July 17, 2016)	8/1/2015
Non Residential Energy Efficient Pumps and Drives Products	2017-65-E	Exhibit 9F – Duke Energy Carolinas Smart Saver® Prescriptive Incentive Program (July 17, 2016)	8/1/2015
Energy Efficient Appliances and Devices	2017-65-E	Exhibit 9 - Save Energy and Water Kit Program - Revised April 12, 2016	3/1/2015
Small Business Energy Saver	2017-65-E	Exhibit 9 - EM&V Report for the Small Business Energy Saver Pogram Duke Energy Progress and Duke Energy Carolinas (September 27, 2016)	3/1/2016
PowerShare	2018-XX-E	Exhibit 5L - 2016 Evaluation Report for the Duke Energy Carolinas PowerShare® Program (January 1, 2017)	
Non Residential Smart Saver Custom	2018-XX-E	Exhibit 5F - Evaluation of the Smart Saver® Custom Incentive Program in North and South Carolina (February 13, 2017)	
My Home Energy Report	2018-XX-E	Exhibit 5C - My Home Energy Report Program Evaluation; Duke Energy Carolinas (February 16, 2017)	
PowerManager	2018-XX-E	Exhibit 5J - Duke Carolinas 2016 Power Manager Evaluation (April 11, 2017)	
Small Business Energy Saver	2018-XX-E	Exhibit 5H - EM&V Report for the Small Business Energy Saver Program Duke Energy Progress and Duke Energy Carolinas (June 6, 2017)	
Non Residential Smart Saver Custom Technical Assessments	2018-XX-E	Exhibit 5E - Non-Residential Assessments Program Year 2014-2016 Evaluation Report (June 8, 2017)	
EnergyWise for Business	2018-XX-E	Exhibit 5K - Duke Energy Carolinas and Progress EnergyWise for Business Programs Evaluation Report - Final (June 12, 2017)	
Multi-Family Energy Efficiency	2018-XX-E	Exhibit 5D - EM&V Report for the Duke Energy Multifamily Energy Efficiency Program (June 27, 2017)	
Non Residential Smart Saver Prescriptive Incentive Program	2018-XX-E	Exhibit 5G - Duke Energy Carolinas Smart Saver Prescriptive Incentive Program (August 4, 2017)	
Energy Efficient Appliances and Devices	2018-XX-E	Exhibit 5B - Save Energy and Water Kits 2016 Program Year Evaluation Report (November 29, 2017)	
Energy Efficient Appliances and Devices	2018-XX-E	Exhibit 5A - Duke Energy Carolinas Energy Efficient Appliances and Devices Program Final Evaluation Report (December 8, 2017)	
Smart Energy in Offices	2018-XX-E	Exhibit 5I - Duke Energy Carolinas Smart Energy in Offices Evaluation Report (December 15, 2017)	

Year 2018 Exhibit 1, as filed March 2, 2018

**Duke Energy Carolinas**  
**Docket No. 2018-xx-E**  
**Calculation of Year 2018 Estimate of Lost Revenues Year 2**

<b>Residential Energy Efficiency Programs</b>		
Line	Reference	Year 2 Projections
1 Residential Net Lost Revenues - Year 2	R10 Exh 1 page 4 Line 109	\$2,340,939
2 Projected SC Residential Sales (kWh)	R10 Exh 3 Page 1 Line 3	6,505,643,783
3 <b>SC Residential EE Billing Factor (Cents/kWh)</b>	<b>Line 1 / Line 2</b>	<b>0.0360</b>
 <b>Non-Residential Energy Efficiency Programs</b>		
Line	Reference	Year 2 Projections
4 Non-Residential Net Lost Revenues - Year 2	R10 Exh 1 page 4 Line 125	\$4,168,069
5 Impact of Revised Rider 9 Forecast	R10 Exh 2 page 3 Line 43	1,267,537
6 Revised Total Revenue Requirement	Line 4 + Line 5	\$5,435,606
7 Projected SC Non-Residential EE Sales (kWh)	R10 Exh 3 Page 1 Line 16	4,288,473,998
8 <b>SC Non-Residential EE Billing Factor (Cents/kWh)</b>	<b>Line 6 / Line 7</b>	<b>0.1267</b>
 Non-Residential DSM Programs		
Line		Year 2 Projections
9 Impact of Revised Rider 9 Rider	R10 Exh 2 page 3 Line 46	313,603
10 Projected SC Non-Residential DSM Sales	R10 Exh 3 page 1 Line 17	5,376,159,681
11 <b>SC Non-Residential DSM Billing Factor (Cents/kWh)</b>	<b>Line 9/Line 10</b>	<b>0.0058</b>

Year 2019 Exhibit 1, Page 1, as filed March 2, 2018

**Duke Energy Carolinas**  
**Docket No. 2018-xx-E**  
**Calculation of Year 2019 Estimate of Earned Utility Savings and Lost Revenues Year 1**

<b>Energy Efficiency Programs</b>		
Line	Reference	Year 1
1 Residential EE Program Cost	Year 2019 Exh 2 (B * E) Line 10	\$15,277,676
2 Residential EE Earned Utility Incentive	Year 2019 Exh 2 (C * E) Line 10	1,652,557
3 Total EE Program Cost and Incentive Components	Year 2019 Exh 2 Line 10	16,930,233
4 Residential DSM Program Cost	Year 2019 Exh 2 (B * E) Line 11	3,416,211
5 Residential DSM Earned Utility Incentive	Year 2019 Exh 2 (C * E) Line 11	1,169,437
6 Total DSM Program Cost and Incentive Components	Year 2019 Exh 2 Line 11	4,585,648
7 Residential Existing DSM Program Revenue Requirement Estimate	Year 2017 Exhibit 3 Line 3	599,227
8 Total EE/DSM Program Cost and Incentive Components	Line 3 + Line 6+ Line 7	22,115,108
9 Revenue-related taxes and regulatory fees factor		1.004487
10 Total EE Program Cost and Incentive Revenue Requirement	Line 8 * Line 9	22,214,339
11 Residential Net Lost Revenues	R10 Exh 1 page 5 Line 130	6,730,566
12 Total Residential EE Revenue Requirement	Line 10 + Line 11	28,944,904
13 Projected SC Residential Sales (kWh)	R10 Exh 3 Page 1 Line 3	6,505,643,783
14 <b>SC Residential EE Billing Factor (Cents/kWh)</b>	<b>Line 12 / Line 13*100</b>	<b>0.4449</b>

Duke Energy Carolinas  
Docket No. 2018-XX-E  
Calculation of Year 2019 Estimated Earned Utility Savings and Year 1 Lost Revenue Estimate

**Non-Residential Energy Efficiency Programs**

Line	Reference	Year 1
1 Non- Residential EE Program Cost	Year 2019 Exh 2 (B * E) Line 25	\$15,526,930
2 Non-Residential EE Earned Utility Incentive	Year 2019 Exh 2 (C * E) Line 25	3,499,309
3 Total EE Program Cost and Incentive Components	Year 2019 Exh 2 Line 25	19,026,239
4 Revenue-related taxes and regulatory fees factor		1.004487
5 Total Non-Residential EE Program Cost and Incentive Revenue Requirements	Line 3 * Line 4	19,111,610
6 Non-Residential Net Lost Revenues	R10 Exh 1 p 5 Line 144	3,158,643
7 Total Non-Residential EE Revenue Requirement	Line 5 + Line 6	22,270,253
8 Projected SC Non-Residential Sales (kWh)	R10 Exh 3 Page 1 Line 16	4,288,473,998
9 <b>SC Non-Residential EE billing factor (Cents/kWh)</b>	Line 7 / Line 8 *100	<b>0.5193</b>

**Non- Residential DSM Programs**

		Year 1
10 Non-Residential DSM Program Cost	Year 2019 Exh 2 (B * E) Line 26	\$4,729,223
11 Non-Residential DSM Earned Utility Incentive	Year 2019 Exh 2 (C * E) Line 26	1,618,907
12 Total Non-Residential DSM Program Cost and Incentive Components	Year 2019 Exh 2 Line 26	6,348,130
13 Non-Residential Existing DSM Program Revenue Requirement	Year 2017 Exhibit 3 Line 3	829,538
14 Total Non-Residential SAW & Existing DSM Program Revenue Requirement	Line 12 + Line 13	7,177,668
15 Revenue-related taxes and regulatory fees factor		1.004487
16 Total Non-Residential DSM Revenue Requirement	Line 14 * Line 15	7,209,874
17 Projected SC Non-Residential Sales (kWh)	R10 Exh 3 p 1 Line 17	5,376,159,681
18 <b>SC Non-Residential DSM billing factor</b>	Line 16 / Line 17 * 100	<b>0.1341</b>

**Year 2019 Exhibit 2, as filed March 2, 2018**

**Duke Energy Carolinas**  
**For the Period January 1, 2019 - December 31, 2019**  
**Docket Number 2018-XX-E**  
**Load Impacts and Estimated Revenue Requirements, Excluding Lost Revenue by Program**

[illegible]

(1) My Home Energy Report impacts reflect cumulative capability as of end of vintage year, including impacts for participants from prior vintage.

(2) Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak

Year 2019 Exhibit 3, as filed March 2, 2018

**Duke Energy Carolinas**  
**For the Period January 1, 2019 - December 31, 2019**  
**Docket Number 2018-XX-E**  
**Allocation Factor Estimate Year 2019**

			MWH			
<b>Sales Allocator - 2015</b>						
1	NC Retail MWH Sales, at Generation	Company Records	60,219,051			
2	SC Retail MWH Sales (Excl. Greenwood), at Generation	Company Records	22,437,625			
3	Total Retail, Excluding Greenwood, at Generation	Line 1 + Line 2	82,656,676			
4	Greenwood Retail MWH Sales, at Generation	Company Records	51,859			
5	Total Retail, including Greenwood, at Generation	Line 3 + Line 4	82,708,535			
<b>Allocation 1 to state based on kWh sales</b>						
6	SC Retail	Line 2 / Line 5	<b>27.12855%</b>			
<b>Demand Allocators - 2015</b>				NC MW	SC MW	Total MW
7	Residential	Company Records	5,545,784	1,791,145	7,336,929	
8	Non Residential (SC - Excl. Greenwood)	Company Records	6,573,854	2,479,566	9,053,420	
9	Greenwood	Company Records	-	13,651	13,651	
10	Total	Line 7 + Line 8+ Line 9	12,119,638	4,284,362	16,404,000	
11	Wholesale Peak Demand	Company Records			1,683,179	
12	Total System Peak Demand	Line 10 + Line 11			18,087,179	
<b>Allocation 2 to state based on peak demand</b>						
13	SC Retail, Excl. Greenwood	(Line 7, SC + Line 8, SC)/ Line 10 Total	<b>26.03457%</b>			
<b>Allocation 3 SC res vs non-res Peak Demand to retail system peak</b>						
14	SC Residential	Line 7,SC / Line 10 Total	<b>10.91895%</b>			
15	SC Non-residential	Line 8, SC / Line 10 Total	<b>15.11562%</b>			
<b>Allocation 4 SC res vs non-res Peak Demand to retail system peak for Existing DSM</b>						
16	SC Residential	Line 7,SC / Line 12 Total	<b>9.90284%</b>			
17	SC Non-residential	Line 8, SC / Line 12 Total	<b>13.70897%</b>			

NOTE: We are continuing to use the allocation factor from 2015 as an estimate. The Company is required to use the latest filed cost of service study. The cost of service study for DEC SC will not be filed until June 2017.



Duke Energy Carolinas  
For the Period January 1, 2014 - December 31, 2019  
Docket Number 2018-xx-E  
South Carolina Lost Revenues Vintage Year 2014-2019

Year 2014		Participation						
		2014 (1/2 year)	2015	2016 <sup>(a)</sup>	2017 (1/2 year) <sup>(a)</sup>	2018	2019	Total
Residential								
1	Appliance Recycling	\$ 28,916	\$ 73,317	\$ 73,220	\$ 43,584			\$ 219,037
2	Energy Efficiency Education	46,748	132,542	132,357	84,435			396,082
3	Energy Efficient Appliances and Devices	1,242,614	2,657,737	2,653,742	1,378,882			7,932,975
4	HVAC Energy Efficiency	35,417	68,699	68,582	32,214			204,912
5	Income Qualified Energy Efficiency and Weatherization Assistance	32,406	62,687	62,617	29,285			186,995
6	Multi-Family Energy Efficiency	35,019	111,334	111,098	75,250			332,701
7	My Home Energy Report	1,828,818	-	-	-			1,828,818
8	Energy Assessments	113,312	187,813	187,560	71,155			559,840
9	Total Lost Revenues	\$ 3,363,250	\$ 3,294,130	\$ 3,289,177	\$ 1,714,804			\$ 11,661,361
10	Found Residential Revenue	11,211	14,175	14,175	2,964			42,525
11	Net Lost Residential Revenues	\$ 3,352,039	\$ 3,279,955	\$ 3,275,002	\$ 1,711,840			\$ 11,618,837
Non-Residential		2014 (1/2 year)	2015	2016 <sup>(a)</sup>	2017 (1/2 year) <sup>(a)</sup>	2018	2019	Total
12	Non-Residential Custom Technical Assessments	\$ 38,770	\$ 55,977	\$ 56,077	\$ 16,505			\$ 167,328
13	Non-Residential Custom	291,023	591,930	594,177	294,580			1,771,711
14	Energy Management Information Systems	-	-	-	-			-
15	Non-Residential Smart Saver Energy Efficient Food Service Products	13,081	17,374	17,421	3,992			51,867
16	Non-Residential Customers Smart Saver®- Energy Efficient HVAC Products	16,091	38,054	38,123	21,822			114,090
17	Non-Residential Smart Saver® - Energy Efficient Lighting Products	464,592	887,302	862,845	373,907			2,588,646
18	Non-Residential Energy Efficient Pumps and Drives Products	13,022	35,941	36,043	22,678			107,685
19	Non-Residential Energy Efficient ITEE	251	1,039	1,042	783			3,114
20	Non-Residential Energy Efficient Process Equipment Products	426	1,533	1,532	1,099			4,591
21	Small Business Energy Saver	7,536	90,107	90,039	82,573			270,256
22	Smart Energy in Offices	1,041	5,428	-	-			6,469
23	Total Lost Revenues	\$ 845,835	\$ 1,724,686	\$ 1,697,298	\$ 817,938			\$ 5,085,757
24	Found Non-Residential Revenue	6,388	9,696	9,696	3,308			29,088
25	Net Non-Residential Revenue	\$ 839,446	\$ 1,714,989	\$ 1,687,602	\$ 814,631			\$ 5,056,669

Duke Energy Carolinas  
For the Period January 1, 2014 - December 31, 2019  
Docket Number 2018-xx-E  
South Carolina Lost Revenues Vintage Year 2014-2019

AMENDED Rider 10, Exhibit 1, Page 2

Year 2015		2014	2015 (1/2 year)	2016 <sup>(a)</sup>	2017 <sup>(a)</sup>	2018	2019	Total
<b>Residential</b>								
26	Appliance Recycling		\$ 42,084	\$ 78,530	\$ 78,299	\$ 36,394	\$	235,306
27	Energy Efficiency Education Program for Schools		22,398	64,563	64,374	42,073		193,409
28	Energy Efficient Appliances and Devices		1,243,191	2,082,649	2,076,546	839,000		6,241,387
29	HVAC Energy Efficiency		38,085	68,587	68,387	30,479		205,538
30	Income Qualified Energy Efficiency and Weatherization Assistance		27,717	49,210	49,066	21,476		147,469
31	Multi-Family Energy Efficiency		83,286	174,419	173,914	91,072		522,692
32	My Home Energy Report		2,494,338	-	-	-		2,494,338
33	Energy Assessments		112,623	191,847	191,282	79,146		574,897
34	Total Lost Revenues		\$ 4,063,721	\$ 2,709,806	\$ 2,701,867	\$ 1,139,641	\$	10,615,036
35	Found Residential Revenue		-	-	-	-		-
36	Net Lost Residential Revenue		\$ 4,063,721	\$ 2,709,806	\$ 2,701,867	\$ 1,139,641	\$	10,615,036
<b>Non-Residential</b>								
37	Non Residential Smart Saver Custom Technical Assessments		\$ -	\$ -	\$ -	\$ -	\$	-
38	Non Residential Smart Saver Custom		161,118	297,731	298,222	136,448		893,520
39	Non Residential Smart Saver Energy Efficient Food Service Products		8,672	14,608	14,626	5,945		43,851
40	Non Residential Smart Saver Energy Efficient HVAC Products		25,013	41,466	41,605	16,450		124,534
41	Non Residential Smart Saver Energy Efficient Lighting Products		503,262	837,360	810,323	319,100		2,470,045
42	Non Residential Energy Efficient Pumps and Drives Products		21,482	30,380	30,466	8,860		91,188
43	Non Residential Energy Efficient ITEE		86	99	99	13		296
44	Non Residential Energy Efficient Process Equipment Products		-	-	-	-		-
45	Small Business Energy Saver		687,783	1,384,241	1,385,040	697,405		4,154,469
46	Smart Energy in Offices		70,504	24,200	-	-		94,705
47	EnergyWise for Business		112	1,342	1,342	1,230		4,026
48	Total Lost Revenues		\$ 1,478,033	\$ 2,631,427	\$ 2,581,724	\$ 1,185,450	\$	7,876,633
49	Found Non-Residential Revenue		-	72	72	389		533
50	Net Lost Residential Revenue		1,478,033	2,631,354	2,581,651	1,185,061		7,876,100

(a) Lost revenues were estimated by applying forecasted lost revenue rates for residential and non-residential customers to state specific program participation.

Duke Energy Carolinas  
For the Period January 1, 2014 - December 31, 2019  
Docket Number 2018-xx-E  
South Carolina Lost Revenues Vintage Year 2014-2019

AMENDED Rider 10 Exhibit 1, Page 3

Year 2016		2014	2015	2016 (1/2 year) <sup>(a)</sup>	2017 <sup>(a)</sup>	2018	2019	Total
<b>Residential</b>								
51	Appliance Recycling			\$ 1,156	\$ 2,445	\$ 2,445	\$ 1,293	\$ 7,340
52	Energy Efficiency Education Program for Schools			49,651	113,539	\$ 113,539	\$ 64,034	340,764
53	Energy Efficient Appliances and Devices			912,502	1,984,438	\$ 1,984,438	\$ 1,074,622	5,956,001
54	HVAC Energy Efficiency			25,732	65,424	\$ 65,424	\$ 39,768	196,348
55	Income Qualified Energy Efficiency and Weatherization Assistance			30,156	64,811	\$ 64,811	\$ 34,744	194,523
56	Multi-Family Energy Efficiency			107,545	232,892	\$ 232,892	\$ 125,659	698,989
57	My Home Energy Report			3,249,461	-	\$ -	\$ -	3,249,461
58	Energy Assessments			80,627	141,718	\$ 141,718	\$ 61,328	425,391
59	Total Lost Revenues			\$ 4,456,831	\$ 2,605,269	\$ 2,605,269	\$ 1,401,449	\$ 11,068,817
60	Found Residential Revenue			-	-	-	-	-
61	Net Lost Residential Revenue			\$ 4,456,831	\$ 2,605,269	\$ 2,605,269	\$ 1,401,449	\$ 11,068,817
<b>Non-Residential</b>								
62	Smart Saver® for Non-Residential Custom Assessments			\$ 12,263	\$ 71,091	\$ 71,091	\$ 58,868	\$ 213,313
63	Smart Saver® for Non-Residential Custom Incentives			101,444	182,977	\$ 182,977	\$ 81,340	548,737
64	Smart Saver® for Non-Residential Customers - Energy Efficient Food Service Products			19,479	92,293	\$ 92,293	\$ 72,782	276,847
65	Smart Saver® for Non-Residential Customers - HVAC			23,846	40,687	\$ 40,687	\$ 16,890	122,110
66	Smart Saver® for Non-Residential Customers - Energy Efficient Lighting Products			804,138	1,793,295	\$ 1,779,342	\$ 981,631	5,358,405
67	Smart Saver® for Non-Residential Customers - Pumps and Drives Products			9,796	23,804	\$ 23,804	\$ 13,977	71,382
68	Smart Saver® for Non-Residential Customers - Energy Efficient ITEE			34	79	\$ 79	\$ 45	237
69	Smart Saver® for Non-Residential Customers - Energy Efficient Process Equipment Products			1,882	2,731	\$ 2,731	\$ 851	8,195
70	Smart Saver® for Non-Residential Customers - Small Business Energy Saver			559,122	1,134,713	\$ 1,134,713	\$ 575,153	3,403,701
71	Smart Saver® for Non-Residential Customers - Smart Energy in Office			70,822	24,541	\$ -	\$ -	95,363
72	Business Energy Report			-	-	\$ -	\$ -	-
73	EnergyWise for Business			5,895	11,102	\$ 11,102	\$ 5,207	33,307
74	Total Lost Revenues			\$ 1,608,722	\$ 3,377,313	\$ 3,338,819	\$ 1,806,744	\$ 10,131,597
75	Found Non-Residential Revenue			2,614	2,385	1,789	-	6,788
76	Net Lost Residential Revenue			1,606,108	3,374,927	3,337,030	1,806,744	10,124,809

Duke Energy Carolinas  
For the Period January 1, 2014 - December 31, 2019  
Docket Number 2018-xx-E  
South Carolina Lost Revenues Vintage Year 2014-2019

AMENDED Rider 10, Exhibit 1, Page 4

Year 2017		2014	2015	2016	2017 (1/2 year) <sup>(a)</sup>	2018	2019	Total
<b>Residential</b>								
77	Appliance Recycling				\$ -	\$ -	\$ -	\$ -
78	Energy Efficiency Education Program for Schools				55,354	100,612	100,612	256,578
79	Energy Efficient Appliances and Devices				1,268,363	2,521,429	2,521,429	6,311,220
80	Residential – Smart \$aver Energy Efficiency Program				61,259	111,714	111,714	284,687
81	Income Qualified Energy Efficiency and Weatherization Assistance				45,026	76,015	76,015	197,056
82	Multi-Family Energy Efficiency				128,153	208,610	208,610	545,373
83	My Home Energy Report				3,641,670	-	-	3,641,670
84	Energy Assessments				87,550	157,129	157,129	401,808
85	Total Lost Revenues				\$ 5,287,375	\$ 3,175,509	\$ 3,175,509	\$ 11,638,392
86	Found Residential Revenue				-	-	-	-
87	Net Lost Residential Revenue				\$ 5,287,375	\$ 3,175,509	\$ 3,175,509	\$ 11,638,392
<b>Non-Residential</b>								
88	Non Residential Smart Saver Custom Technical Assessments				\$ 98,727	\$ 146,303	\$ 146,303	\$ 391,333
89	Non Residential Smart Saver Custom				359,181	\$ 505,535	\$ 505,535	1,370,251
90	Non Residential Smart Saver Energy Efficient Food Service Products				9,829	\$ 16,296	\$ 16,296	42,421
91	Non Residential Smart Saver Energy Efficient HVAC Products				33,488	\$ 58,501	\$ 58,501	150,490
92	Non Residential Smart Saver Energy Efficient Lighting Products				2,004,711	\$ 3,291,343	\$ 3,290,258	8,586,312
93	Non Residential Energy Efficient Pumps and Drives Products				7,150	\$ 14,034	\$ 14,034	35,218
94	Non Residential Energy Efficient ITEE				23	\$ 40	\$ 40	102
95	Non Residential Energy Efficient Process Equipment Products				3,851	\$ 13,895	\$ 13,895	31,640
96	Small Business Energy Saver				878,196	\$ 1,781,203	\$ 1,781,203	4,440,602
96	Smart Energy in Offices				73,273	\$ 26,992	\$ -	100,266
96	EnergyWise for Business				13,213	\$ 38,661	\$ 38,661	90,534
97	Business Energy Report				-	\$ -	\$ -	-
96	Total Lost Revenues				\$ 3,481,642	\$ 5,892,803	\$ 5,864,726	\$ 15,239,170
97	Found Non-Residential Revenue				-	-	-	-
98	Net Lost Residential Revenue				3,481,642	5,892,803	5,864,726	15,239,170

Duke Energy Carolinas  
For the Period January 1, 2014 - December 31, 2019  
Docket Number 2018-xx-E  
South Carolina Lost Revenues Vintage Year 2014-2019

Rider 10, Exhibit 1, Page 5, as filed March 2, 2018

Year 2018		2014	2015	2016	2017	2018 (1/2 year) <sup>(a)</sup>		2019	Total		
Residential											
99	Appliance Recycling					\$	-	\$	-		
100	Energy Efficiency Education Program for Schools						58,705	110,566	169,272		
101	Energy Efficient Appliances and Devices						981,510	1,630,729	2,612,239		
102	Residential – Smart \$aver Energy Efficiency Program						41,403	52,279	93,682		
103	Income Qualified Energy Efficiency and Weatherization Assistance						54,727	103,074	157,802		
104	Multi-Family Energy Efficiency						163,566	308,061	471,627		
105	My Home Energy Report						5,463,642	-	5,463,642		
106	Energy Assessments						72,331	136,229	208,561		
107	Total Lost Revenues					\$	6,835,885	\$	2,340,939	\$	9,176,824
108	Found Residential Revenue						-	-	-		
109	Net Lost Residential Revenue					\$	6,835,885	\$	2,340,939	\$	9,176,824
Non-Residential		2014	2015	2016		2018 (1/2 year) <sup>(a)</sup>		2019	Total		
110	Non Residential Smart Saver Custom Technical Assessments					\$	124,035	\$	248,320	\$	372,355
111	Non Residential Smart Saver Custom						523,869	1,048,797	1,572,666		
112	Non Residential Smart Saver Energy Efficient Food Service Products						4,814	10,033	14,847		
113	Non Residential Smart Saver Energy Efficient HVAC Products						28,449	62,468	90,917		
114	Non Residential Smart Saver Energy Efficient Lighting Products						548,862	1,161,935	1,710,797		
115	Non Residential Energy Efficient Pumps and Drives Products						14,031	31,949	45,980		
116	Non Residential Energy Efficient ITEE						22,835	53,766	76,601		
117	Non Residential Energy Efficient Process Equipment Products						1,454	3,434	4,888		
118	Non Residential Smart Saver Performance Incentive						84,795	169,761	254,556		
119	Small Business Energy Saver						510,644	1,354,356	1,865,000		
120	Smart Energy in Offices						77,693	-	77,693		
121	EnergyWise for Business						22,334	23,250	45,584		
122	Business Energy Report						-	-	-		
123	Total Lost Revenues					\$	1,963,814	\$	4,168,069	\$	6,131,884
124	Found Non-Residential Revenue						-	-	-		
125	Net Lost Residential Revenue						1,963,814	4,168,069	6,131,884		

(a) Lost revenues were estimated by applying forecasted lost revenue rates for residential and non-residential customers to state specific forecasted program participation.

Duke Energy Carolinas  
For the Period January 1, 2014 - December 31, 2019  
Docket Number 2018-xx-E  
South Carolina Lost Revenues Vintage Year 2014-2019

Rider 10, Exhibit 1, Page 6, as filed March 2, 2018

Year 2019		2014	2015	2016	2017	2018	2019 (1/2 year) <sup>(a)</sup>	Total
<b>Residential</b>								
126	Energy Efficiency Education Program for Schools						50,314	50,314
127	Energy Efficient Appliances and Devices						918,462	918,462
128	Residential – Smart \$aver Energy Efficiency Program						54,686	54,686
129	Income Qualified Energy Efficiency and Weatherization Assistance						45,898	45,898
130	Multi-Family Energy Efficiency						214,215	214,215
131	My Home Energy Report						5,369,925	5,369,925
132	Energy Assessments						77,065	77,065
133	Total Lost Revenues						\$ 6,730,566	\$ 6,730,566
134	Found Residential Revenue						-	-
135	Net Lost Residential Revenue						\$ 6,730,566	\$ 6,730,566
<b>Non-Residential</b>		2014	2015	2016		2018	2019 (1/2 year) <sup>(a)</sup>	Total
136	Non Residential Smart Saver Custom Technical Assessments						\$ 69,778	\$ 69,778
137	Non Residential Smart Saver Custom						417,092	417,092
138	Non Residential Smart Saver Energy Efficient Food Service Products						127,411	127,411
139	Non Residential Smart Saver Energy Efficient HVAC Products						173,259	173,259
140	Non Residential Smart Saver Energy Efficient Lighting Products						1,433,533	1,433,533
141	Non Residential Energy Efficient Pumps and Drives Products						80,276	80,276
142	Non Residential Energy Efficient ITEE						82,559	82,559
143	Non Residential Energy Efficient Process Equipment Products						12,856	12,856
144	Non Residential Smart Saver Performance Incentive						147,714	147,714
145	Small Business Energy Saver						590,741	590,741
146	EnergyWise for Business						23,424	23,424
147	Total Lost Revenues						\$ 3,158,643	\$ 3,158,643
148	Found Non-Residential Revenue						-	-
149	Net Lost Residential Revenue						3,158,643	3,158,643

(a) Lost revenues were estimated by applying forecasted lost revenue rates for residential and non-residential customers to state specific forecasted program participation.

Duke Energy Carolinas  
For the Period January 1, 2014 - December 31, 2018  
Docket Number 2017-xx-E  
DSM/EE Actual Revenues Collected from Years 2014- 2016 (By Vintage)  
and Estimated 2018 Collections from Rider 9 (By Vintage)

			Actual 2014	Actual 2015	Actual 2016	<sup>1</sup> Actual 2017		Estimated 2018	<sup>2</sup>	Total Revenue Estimated Collected through 2018
Line	New Mechanism		Rider 5	Rider 6	Rider 7	Rider 8	Total	Rider 9		
Residential										
1	EE and DSM	2014	15,850,391	5,091,529	5,949,515	1,121,328	28,012,764	479,780		28,492,544
2	EE and DSM	2015		16,272,294	5,212,244	3,566,456	25,050,995	2,426,396		27,477,391
3	EE and DSM	2016			18,936,713	4,209,049	23,145,762	8,196,424		31,342,186
4	EE and DSM	2017				22,373,744	22,373,744	1,652,159		24,025,903
5	EE and DSM	2018						29,955,401		29,955,401
6	Interest	2014			358,296	226,334	584,630	26,480		611,110
7	Interest	2015				355,176	355,176	167,752		522,928
8	Interest	2016				-	-	729,500		729,500
9	Interest	2017					-			-
Non-Residential										
10	EE	2014	4,914,295	2,245,959	4,559,482	607,104	12,326,840	1,005,254		13,332,094
11	EE	2015		5,475,152	4,020,808	9,438,922	18,934,882	1,748,514		20,683,396
12	EE	2016			14,145,231	5,235,479	19,380,711	12,342,340		31,723,050
13	EE	2017				17,081,335	17,081,335	3,625,467		20,706,802
14	EE	2018					-	21,549,848		21,549,848
15	EE Interest	2014			422,949	129,830	552,779	104,539		657,318
16	EE Interest	2015				1,046,313	1,046,313	378,146		1,424,459
17	EE Interest	2016				-	-	1,152,892		1,152,892
18	EE Interest	2017					-			-
19	DSM	2014	4,898,790	1,303,762	375,524	252,328	6,830,404	54,178		6,884,582
20	DSM	2015		5,257,163	1,409,288	579,530	7,245,982	78,472		7,324,453
21	DSM	2016			5,730,973	687,354	6,418,327	31,261		6,449,588
22	DSM	2017				6,368,636	6,368,636			6,368,636
23	DSM	2018						6,607,583		6,607,583
24	DSM Interest	2014			178,020	24,317	202,337	16,089		218,426
25	DSM Interest	2015				178,893	178,893	32,129		211,022
26	DSM Interest	2016				-		54,403		54,403
27	DSM Interest	2017								-
28 Total Revenue Collected										
			\$ 25,663,476	\$ 35,645,860	\$ 61,299,043	\$ 73,482,128	\$ 81,837,397	\$ 92,415,006	\$	288,505,514

<sup>1</sup> Actual 2014, 2015 and 2016 Revenue Source: Rider 9 Exhibit 2 Docket 2017-65-E as filed in conjunction with the Office of Regulatory Staff's review of Duke Energy Carolinas, LLC Application for Approval of Rider 9.

<sup>2</sup> Estimated 2018 Revenue Source: R10 Exh 2 page 2. The estimated revenue has been revised from the final Rider 9 filing to reflect correction of the forecast used in Rider 9 to exclude lighting. In order to calculate interest properly, the component of interest that is estimated to be collected related to prior year collection of revenues has been segregated from the revenue requirement.

Duke Energy Carolinas  
For the Period January 1, 2014 - December 31, 2018  
Docket Number 2017-XX-E  
Revised Estimated 2018 Collections

		Revised Estimated 2018 Collections	Rider 9 Final
<b>Residential Billing Factor</b> 1 Costs to be Recovered for Year 2014 True Up 2 Costs to be Recovered for Year 2015 True up 3 Cost to be Recovered for Year 2016 True up 4 Total Cost to be Recovered Vintages Year 2014, Year 2015 and Year 2016 True-ups 5 Projected SC Residential Sales (kWh) for rate period 6 Revenue Requirement True-up Component for <b>Residential Rider EE (cents per kWh)</b>	Year 2014 Exhibit 1, Line 16 Year 2015 Exhibit 1, Line 16 Year 2016 Exhibit 1, line 16 Line 1 through line 3 R9 Exhibit 3, Page 1 Line 3 Line 4 / Line 5 * 100	506,260 1,451,130 6,297,424 8,254,814 6,540,356,263 <b>0.1262</b>	506,260 1,451,130 6,297,424 8,254,814 6,540,356,263 <b>0.1262</b>
	Year 2015 Exhibit 1, Line 16 Year 2016 Exhibit 1, Line 16 Year 2017 Exhibit 1 Line 1 Year 2018 Exhibit 1, pg 1 Line 12 R9 Exhibit 3 page 2 Line 7 through Line 11 R9 Exhibit 3, Page 1 Line 3 Line 12 / Line 13 * 100	1,143,018 2,628,500 1,652,159 30,054,409 99,008 35,379,079 6,540,356,263 <b>0.5409</b>	1,143,018 2,628,500 1,652,159 30,054,409 99,008 35,379,079 6,540,356,263 0.5409
	Line 4 + Line 12 Line 6 + Line 14	\$ 43,633,893 <b>0.6671</b>	43,633,893 0.6671
	15 Total Revenue Requirement for Residential Rider EE 16 Total Revenue Requirement for <b>Residential Rider EE (cents per kWh)</b>		
	Year 2014 Exhibit 1 Line 27 R9 Exhibit 3, Page 1 Line 8 Line 16/Line 17 * 100	\$ 1,109,793 4,954,433,049 0.0224	1,169,637 5,225,420,299 0.0224
	Year 2014 Exhibit 1 Line 40 R9 Exhibit 3, Page 1 Line 9 Line 19/Line 20 * 100	\$ 70,267 5,855,602,645 0.0012	71,053 6,126,589,895 0.0012
	Year 2015 Exhibit 1 Line 27 R9 Exhibit 3, Page 1 Line 10 Line 22/Line 23 * 100	\$ 994,810 5,075,559,799 0.0196	1,046,777 5,346,547,049 0.0196
	Year 2015 Exhibit 1 Line 40 R9 Exhibit 3, Page 1 Line 11 Line 25/Line 26 * 100	\$ 110,601 5,821,088,189 0.0019	114,476 6,092,075,439 0.0019
	Year 2016 Exhibit 1 Line 27 R9 Exhibit 3, Page 1 Line 12 Line 28/Line 29 * 100	\$ 10,309,785 4,768,633,093 0.2162	10,895,195 5,039,620,343 0.2162
	Year 2016 Exhibit 1 Line 40 R9 Exhibit 3, Page 1 Line 13 Line 31/Line 32 * 100	\$ 85,664 5,710,962,215 0.0015	90,216 5,981,949,465 0.0015
<b>Non-Residential Billing Factors for Rider 9 True-Up Components</b>			
16 Total Vintage Year 2014 True-Up EE Revenue Requirement - Vintage Year 2014 EE Participant 17 Projected Vintage Year 2014 EE Participants SC Non-Residential Sales (kwh) for rate period 18 EE Revenue Requirement Vintage Year 2014 True-up <b>Non-Residential Rider EE (cents per kWh)</b>			
19 Total Vintage Year 2014 DSM True Up Revenue Requirement - Vintage Year 2014 DSM Participant 20 Projected Vintage Year 2014 DSM Participants SC Non-Residential Sales (kwh) for rate period 21 DSM Revenue Requirement Vintage Year 2014 True-up <b>Non-Residential Rider EE (cents per kWh)</b>			
22 Total Vintage Year 2015 True-Up EE Revenue Requirement - Vintage Year 2015 EE Participant 23 Projected Vintage Year 2015 EE Participants SC Non-Residential Sales (kwh) for rate period 24 EE Revenue Requirement Vintage Year 2015 True-up <b>Non-Residential Rider EE (cents per kWh)</b>			
25 Total Vintage Year 2015 DSM True Up Revenue Requirement - Vintage Year 2015 DSM Participant 26 Projected Vintage Year 2015 DSM Participants SC Non-Residential Sales (kwh) for rate period 27 DSM Revenue Requirement Vintage Year 2015 True-up <b>Non-Residential Rider EE (cents per kWh)</b>			
28 Total Vintage Year 2016 True-Up EE Revenue Requirement - Vintage Year 2016 EE Participant 29 Projected Vintage Year 2016 EE Participants SC Non-Residential Sales (kwh) for rate period 30 EE Revenue Requirement Vintage Year 2016 True-up <b>Non-Residential Rider EE (cents per kWh)</b>			
31 Total Vintage Year 2016 DSM True Up Revenue Requirement - Vintage Year 2016 DSM Participant 32 Projected Vintage Year 2016 DSM Participants SC Non-Residential Sales (kwh) for rate period 33 DSM Revenue Requirement Vintage Year 2016 True-up <b>Non-Residential Rider EE (cents per kWh)</b>			
<b>Non-Residential Billing Factors for Rider 9 Prospective Components</b>			
34 Total Vintage Year 2015 Prospective EE Revenue Requirement - Vintage Year 2015 EE Participant 35 Projected Vintage Year 2015 EE Participants SC Non-Residential Sales (kwh) for rate period 36 EE Revenue Requirement Vintage Year 2015 Lost Revenues <b>Non-Residential Rider EE (cents per kWh)</b>	Year 2015 Exhibit 1, Line 27 R9 Exhibit 3, Page 1 Line 10 Line 34/Line 35 * 100	\$ 1,131,850 5,075,559,799 0.0223	1,189,630 5,346,547,049 0.0223
	Year 2016 Exhibit 1, Line 27 R9 Exhibit 3, Page 1 Line 12 Line 37/Line 38 * 100	\$ 3,185,447 4,768,633,093 0.0668	3,365,361 5,039,620,343 0.0668
	Year 2017 Exhibit 1, Line 4 R9 Exhibit 3, Page 2 Line 14 Line 40/Line 41 * 100	\$ 3,625,467 4,612,553,064 0.0786	3,838,481 4,883,540,314 0.0786
	Year 2018 Exhibit 1, Pg. 2, Line 7 R9 Exhibit 3, Page 2 Line 16 Line 43/Line 44 * 100	\$ 21,549,848 4,612,553,064 0.4672	22,817,385 4,883,540,314 0.4672
	Year 2018 Exhibit 1, Pg. 2, Line 16 R9 Exhibit 3, Page 2 Line 17 Line 46/Line 47 * 100	\$ 6,607,583 5,710,962,215 0.1157	6,921,186 5,981,949,465 0.1157



**Duke Energy Carolinas**  
**For the Period January 1, 2016 - December 31, 2016**  
**Docket Number 2017-XX-E**  
**Revised Forecasted kWh Sales for Years 2014-2018**

### Fall 2016 Sales Forecast - kWhs

Adjusted SC Retail Sales Forecast (excludes Greenwood sales)		2018 Sales	Factor to Exclude Greenwood Sales from Forecast	2017 MWh Usage	Percent to Total
1 Residential	Company Records	6,588,051,781	Total SC Residential Sales	6,646,567	
2 Factor to exclude Greenwood	see calc. to right	99.27603%	Greenwood Residential Sales	48,119	
3 Residential sales excluding Greenwood	Line 1*Line 2	6,540,356,263	SC Residential Sales excluding Greenwood	6,598,448	99.27603%
4 Non-Residential (excluding lighting)	Company Records	14,769,208,102	Total SC Non-Residential Sales (excluding lighting)	14,675,357	
5 Factor to exclude Greenwood	see calc. to right	99.97671%	Greenwood Non-Residential Sales (exc. lighting)	3,418	
6 Non-Residential sales excluding Greenwood	Line 4*Line 5	14,765,768,353	SC Non-Residential Sales excluding Greenwood	14,671,939	99.97671%
7 Total Retail sales excluding Greenwood	Line 3 + Line 6	<u>21,306,124,616</u>	Total SC Retail Sales (excluding lighting)	21,321,925	
			Greenwood Retail Sales (excluding lighting)	51,537	
			SC Retail Sales excluding Greenwood (exc. lighting)	21,270,388	

### Opt Out Sales

	Total Retail Sales	Less: Opt Outs	Net Retail Sales
Year 2014			
8 EE	14,765,768,353	9,811,335,304	4,954,433,049
9 DSM	14,765,768,353	8,910,165,708	5,855,602,645
Year 2015			
10 EE	14,765,768,353	9,690,208,554	5,075,559,799
11 DSM	14,765,768,353	8,944,680,164	5,821,088,189
Year 2016			
12 EE	14,765,768,353	9,997,135,260	4,768,633,093
13 DSM	14,765,768,353	9,054,806,138	5,710,962,215
Year 2017			
14 EE	14,765,768,353	10,153,215,289	4,612,553,064
15 DSM	14,765,768,353	9,054,806,138	5,710,962,215
Year 2018			
16 EE	14,765,768,353	10,153,215,289	4,612,553,064
17 DSM	14,765,768,353	9,054,806,138	5,710,962,215

**Duke Energy Carolinas**  
**For the Period January 1, 2017 - December 31, 2017**  
**Docket Number 2018-XX-E**  
**Forecasted kWh Sales for Years 2014-2019**

### Fall 2017 Sales Forecast - kWhs

Adjusted SC Retail Sales Forecast (excludes Greenwood sales)		2019 Sales	Factor to Exclude Greenwood Sales from Forecast	2018 MWh Usage	Percent to Total
1 Residential	Company Records	6,550,498,320	Total SC Residential Sales	6,249,734	
2 Factor to exclude Greenwood	see calc. to right	99.31525%	Greenwood Residential Sales	42,795	
3 Residential sales excluding Greenwood	Line 1*Line 2	6,505,643,783	SC Residential Sales excluding Greenwood	6,206,939	99.31525%
4 Non-Residential (excluding lighting)	Company Records	14,691,588,839	Total SC Non-Residential Sales (excluding lighting)	14,573,797	
5 Factor to exclude Greenwood	see calc. to right	99.97683%	Greenwood Non-Residential Sales (exc. lighting)	3,377	
6 Non-Residential sales excluding Greenwood	Line 4*Line 5	14,688,184,798	SC Non-Residential Sales excluding Greenwood	14,570,420	99.97683%
7 Total Retail sales excluding Greenwood	Line 3 + Line 6	<u>21,193,828,581</u>	Total SC Retail Sales (excluding lighting)	20,823,532	
			Greenwood Retail Sales (excluding lighting)	46,172	
			SC Retail Sales excluding Greenwood (exc. lighting)	20,777,360	

### Opt Out Sales

	Total Retail Sales	Less: Opt Outs	Net Retail Sales
Year 2014			
8 EE	14,688,184,798	10,060,507,512	4,627,677,286
9 DSM	14,688,184,798	9,125,609,116	5,562,575,682
Year 2015			
10 EE	14,688,184,798	9,930,991,926	4,757,192,872
11 DSM	14,688,184,798	9,165,381,132	5,522,803,666
Year 2016			
12 EE	14,688,184,798	10,201,066,989	4,487,117,809
13 DSM	14,688,184,798	9,247,406,362	5,440,778,436
Year 2017			
14 EE	14,688,184,798	10,327,558,563	4,360,626,235
15 DSM	14,688,184,798	9,247,406,362	5,440,778,436
Year 2018			
16 EE	14,688,184,798	10,399,710,800	4,288,473,998
17 DSM	14,688,184,798	9,312,025,117	5,376,159,681
Year 2019			
18 EE	14,688,184,798	10,399,710,800	4,288,473,998
19 DSM	14,688,184,798	9,312,025,117	5,376,159,681

### Summary:

Non-residential customers participating in the net Metering program are assumed to be opted out of the EE programs and their fee does not include an EE component.

Since revenue collected is not assigned a vintage, it will be subtracted from the total revenue requirement requested on Exhibit A.

[illegible]

Duke Energy Carolinas  
For the Period January 2014 - December 31, 2018  
Docket Number 2017-XX-E  
Residential Interest Calculation - Year 2014 -2015

Residential

Year 2014		2014	2015	2016	2017	2018	Total
1 Revenue Requirement	Year 2014 Exhibit 1	\$ 22,097,045	\$ 1,781,962	\$ 2,735,812	\$ 1,817,583		\$ 28,432,402
2 Revenue Collections	Rider 10, Exhibit 2	15,850,391	5,091,529	5,949,515	1,121,328	479,780	28,492,544
3 (Over) / Under Collection	Line 1 - Line 2	6,246,654	(3,309,567)	(3,213,703)	696,255	(479,780)	(60,141)
4 Cumulative (Over)/Under Collection	Line 3 + Prior Year Line 4	6,246,654	2,937,087	(276,616)	419,639	(60,141)	
5 Average Balance (Over)/Under Collection		3,123,327	4,591,870	1,330,235	71,511	179,749	
6 Monthly rate (WACC)	Line 13/12	0.005782	0.005782	0.005782	0.005782	0.005782	
7 Number of Months		12	12	12	12	12	
8 Interest Due (Owed)	Line 5 * Line 6* Line 7	\$ 216,709	\$ 318,602	\$ 92,297	\$ 4,962	\$ 12,472	\$ 645,042
9 Interest Paid (Returned) in Prior Rider	R9 Exh 2 Line 5						611,110
10 Interest Due - Rider 10	Line 8 - Line 9						\$ 33,932
11 Gross Receipts Tax							1.004487
12 Interest Due - including GRT - Rider 10	Line 10 * Line 11						\$ 34,084
13 Weighted average cost of capital (WACC)		6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	

Year 2015		2015	2016	2017	2018	Total
14 Revenue Requirement	Year 2015 Exhibit 1	\$ 20,863,572	\$ 2,913,969	\$ 2,698,157	\$ 1,143,018	\$ 27,618,716
15 Revenue Collections	Rider 10, Exhibit 2	16,272,294	5,212,244	3,566,456	2,426,396	27,477,391
16 (Over) / Under Collection	Line 1 - Line 2	4,591,278	(2,298,275)	(868,299)	(1,283,378)	141,325
17 Cumulative (Over)/Under Collection	Line 3 + Prior Year Line 4	4,591,278	2,293,003	1,424,703	141,325	
18 Average Balance (Over)/Under Collection		2,295,639	3,442,140	1,858,853	783,014	
19 Monthly rate (WACC)	Line 13/12	0.005782	0.005782	0.005782	0.005782	
20 Number of Months		12	12	12	12	
21 Interest Due (Owed)	Line 5 * Line 6* Line 7	\$ 159,281	\$ 238,829	\$ 128,975	\$ 54,329	\$ 581,413
22 Interest Paid (Returned) in Prior Rider	R9 Exh 2 Line 6					522,928
23 Interest Due - Rider 10	Line 8 - Line 9					\$ 58,485
24 Gross Receipts Tax						1.004487
25 Interest Due - including GRT - Rider 10	Line 10 * Line 11					\$ 58,748
26 Weighted average cost of capital (WACC)		6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	

NOTE A: Docket 2013-59-E

Duke Energy Carolinas  
For the Period January 2014 - December 31, 2018  
Docket Number 2018-XX-E  
Residential Interest Calculation - Year 2016 - 2017

Residential

Year 2016		<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
1 Revenue Requirement	Year 2016 Exhibit 1	\$ 26,619,929	\$ 2,541,280	\$ 2,628,500	\$ 31,789,709
2 Revenue Collections	Rider 10, Exhibit 2	18,936,713	4,209,049	8,196,424	Note B 31,342,186
3 (Over) / Under Collection	Line 1 - Line 2	7,683,215	(1,667,768)	(5,567,924)	447,523
4 Cumulative (Over)/Under Collection	Line 3 + Prior Year Line 4	7,683,215	6,015,447	447,523	
5 Average Balance (Over)/Under Collection		3,841,608	6,849,331	3,231,485	
6 Monthly rate (WACC)	Line 13/12	0.005782	0.005782	0.005782	
7 Number of Months		12	12	12	
8 Interest Due (Owed)	Line 5 * Line 6* Line 7	\$ 266,546	\$ 475,234	\$ 224,213	\$ 965,993
9 Interest Paid (Returned) in Prior Rider	N/A				729,500
10 Interest Due - Rider 10	Line 8 - Line 9				\$ 236,493
11 Gross Receipts Tax					1.004487
12 Interest Due - including GRT - Rider 10	Line 10 * Line 11				\$ 237,555
13 Weighted average cost of capital (WACC)		6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	

NOTE A: Docket 2013-59-E

NOTE B: Estimated Year 3 lost revenue and revenue collections have been included in the interest true-up. Assumed collection on Rider 10 Exhibit 2, page 1 of 3.

Year 2017		<u>2017</u>	<u>2018</u>	<u>Total</u>
1 Revenue Requirement	Year 2017 Exhibit 1	\$ 30,462,648	\$ 4,202,002	\$ 34,664,650
2 Revenue Collections	Rider 10, Exhibit 2	22,373,744	1,652,159	Note B 24,025,903
3 (Over) / Under Collection	Line 1 - Line 2	8,088,904	2,549,843	10,638,747
4 Cumulative (Over)/Under Collection	Line 3 + Prior Year Line 4	8,088,904	10,638,747	
5 Average Balance (Over)/Under Collection		4,044,452	9,363,826	
6 Monthly rate (WACC)	Line 13/12	0.005782	0.005782	
7 Number of Months		12	12	
8 Interest Due (Owed)	Line 5 * Line 6* Line 7	\$ 280,620	\$ 649,700	\$ 930,320
9 Interest Paid (Returned) in Prior Rider	N/A			-
10 Interest Due - Rider 10	Line 8 - Line 9			\$ 930,320
11 Gross Receipts Tax				1.004487
12 Interest Due - including GRT - Rider 10	Line 10 * Line 11			\$ 934,494
13 Weighted average cost of capital (WACC)		6.9384% NOTE A	6.9384% NOTE A	

NOTE A: Docket 2013-59-E

NOTE B: Estimated Year 2 lost revenue and revenue collections have been included in the interest true-up. Assumed collection on Rider 10 Exhibit 2, page 1 of 3.

Duke Energy Carolinas  
For the Period January 2014 - December 31, 2018  
Docket Number 2018-xx-E  
Non-Residential Interest Calculation - Year 2014

Non-Residential

Year 2014 - Energy Efficiency		<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
1 Revenue Requirement	Year 2014 Exhibit 1	\$ 9,253,506	\$ 1,752,086	\$ 1,542,274	\$ 814,387		\$ 13,362,252
2 Revenue Collections	Rider 10, Exhibit 2	4,914,295	2,245,959	4,559,482	607,104	1,005,254	13,332,094
3 (Over) / Under Collection	Line 1 - Line 2	4,339,211	(493,873)	(3,017,208)	207,283	(1,005,254)	30,159
4 Cumulative (Over)/Under Collection	Line 3 + Prior Year Line 4	4,339,211	3,845,337	828,129	1,035,413	30,159	
5 Average Balance (Over)/Under Collection		2,169,605	4,092,274	2,336,733	931,771	532,786	
6 Monthly rate (WACC)	Line 13/12	0.5782%	0.5782%	0.5782%	0.5782%	0.5782%	
7 Number of Months		12	12	12	12	12	
8 Interest Due (Owed)	Line 5 * Line 6 * Line 7	\$ 150,536	\$ 283,938	\$ 162,132	\$ 64,650	\$ 36,967	\$ 698,223
9 Interest Paid (Returned) in prior rider	R9 Exh 2 Line 12						657,318
10 Interest Due - Rider 10	Line 8 - Line 9						\$ 40,905
11 Gross Receipts Tax							1.004487
12 Interest Due - including GRT - Rider 10	Line 10 * Line 11						\$ 41,088
13 Weighted average cost of capital (WACC)		6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	

NOTE A: Docket 2013-59-E

Year 2014 - DSM		<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
14 Revenue Requirement	Year 2014, Exhibit 1	\$ 6,932,995	\$ -	\$ -			\$ 6,932,995
15 Revenue Collections	Rider 10, Exhibit 2	4,898,790	1,303,762	375,524	252,328	54,178	6,884,582
16 (Over) / Under Collection	Line 14 - Line 15	2,034,204	(1,303,762)	(375,524)	(252,328)	(54,178)	48,413
17 Cumulative (Over)/Under Collection	Line 16 + Prior Year Line 17	2,034,204	730,442	354,919	102,591	48,413	
18 Average Balance (Over)/Under Collection		1,017,102	1,382,323	542,680	228,755	75,502	
19 Monthly rate (WACC)	Line 26/12	0.5782%	0.5782%	0.5782%	0.5782%	0.5782%	
20 Number of Months		12	12	12	12	12	
21 Interest Due (Owed)	Line 18 * Line 19 * Line 20	\$ 70,571	\$ 95,911	\$ 37,653	\$ 15,872	\$ 5,239	225,246
22 Interest Paid (Returned) in Prior Rider	R9 Exh 2 Line 19						218,426
23 Interest Due - Rider 10	Line 21 - Line 22						\$ 6,820
24 Gross Receipts Tax							1.004487
25 Interest Due - including GRT - Rider 10	Line 23 * Line 24						\$ 6,850
26 Weighted average cost of capital (WACC)		6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	

NOTE A: Docket 2013-59-E

NOTE B: Estimated Year 4 (Year 2014) lost revenue and revenue collections have been included in the interest true-up. Assumed collection on Rider 10 Exhibit 2, page 1 of 3.

Duke Energy Carolinas  
For the Period January 2014 - December 31, 2018  
Docket Number 2018-xx-E  
Non-Residential Interest Calculation Year 2015

Non-Residential

Year 2015 - Energy Efficiency		2015	2016	2017	2018	Total
1 Revenue Requirement before interest	Year 2015 Exhibit 1	\$ 15,997,437	\$ 3,147,757	\$ 2,221,098	\$ 1,189,630	\$ 22,555,922
2 Revenue Collections	Rider 10, Exhibit 2	5,475,152	4,020,808	9,438,922	1,748,514	20,683,396
3 (Over) / Under Collection	Line 1 - Line 2	10,522,284	(873,051)	(7,217,824)	(558,884)	1,872,527
4 Cumulative (Over)/Under Collection	Line 3 + Prior Year Line 4	10,522,284	9,649,234	2,431,410	1,872,527	
5 Average Balance (Over)/Under Collection		5,261,142	10,085,759	6,040,322	2,151,968	
6 Monthly rate (WACC)	Line 13/12	0.5782%	0.5782%	0.5782%	0.5782%	
7 Number of Months		12	12	12	12	
8 Interest Due (Owed)	Line 5 * Line 6 * Line 7	\$ 365,039	\$ 699,790	\$ 419,102	\$ 149,312	\$ 1,633,243
9 Interest Paid (Returned) in prior rider	R9 Exh 2 Line 13					1,424,459
10 Interest Due - Rider 10	Line 8 - Line 9					\$ 208,784
11 Gross Receipts Tax						1.004487
12 Interest Due - including GRT - Rider 10	Line 10 * Line 11					\$ 209,721
13 Weighted average cost of capital (WACC)		6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	

NOTE A: Docket 2013-59-E  
NOTE B: Estimated 2015 Y4 lost Revenue and revenue collected have been included in the interest true-up at the anticipated collection amount.

Year 2015 - DSM		2015	2016	2017	2018	Total
14 Revenue Requirement before interest	Year 2015, Exhibit 1	\$ 7,467,622	\$ -			\$ 7,467,622
15 Revenue Collections	Rider 10, Exhibit 2	5,257,163	1,409,288	579,530	78,472	7,324,453
16 (Over) / Under Collection	Line 14 - Line 15	2,210,459	(1,409,288)	(579,530)	(78,472)	143,168
17 Cumulative (Over)/Under Collection	Line 16 + Prior Year Line 17	2,210,459	801,170	221,640	143,168	
18 Average Balance (Over)/Under Collection		1,105,229	1,505,815	511,405	182,404	
19 Monthly rate (WACC)	Line 26/12	0.5782%	0.5782%	0.5782%	0.5782%	
20 Number of Months		12	12	12	12	
21 Interest Due (Owed)	Line 18 * Line 19 * Line 20	\$ 76,685	\$ 104,479	\$ 35,483	\$ 12,656	229,304
22 Interest Paid (Returned) in Prior Rider	R9 Exh 2 Line 20					211,022
23 Interest Due - Rider 10	Line 21 - Line 22					\$ 18,282
24 Gross Receipts Tax						1.004487
25 Interest Due - including GRT - Rider 10	Line 23 * Line 24					\$ 18,364
26 Weighted average cost of capital (WACC)		6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	

NOTE A: Docket 2013-59-E  
NOTE B: Estimated 2015 Y4 lost Revenue and revenue collected have been included in the interest true-up at the anticipated collection amount.

Duke Energy Carolinas  
For the Period January 2014 - December 31, 2018  
Docket Number 2018-xx-E  
Non-Residential Interest Calculation Year 2016

Non-Residential

Year 2016 - Energy Efficiency		2016	2017	2018	Total
1 Revenue Requirement before interest	Year 2016 Exhibit 1	\$ 25,816,275	\$ 3,007,387	\$ 3,365,361	\$ 32,189,023
2 Revenue Collections	Rider 10, Exhibit 2	14,145,231	5,235,479	12,342,340	31,723,050
3 (Over) / Under Collection	Line 1 - Line 2	11,671,044	(2,228,092)	(8,976,979)	465,973
4 Cumulative (Over)/Under Collection	Line 3 + Prior Year Line 4	11,671,044	9,442,952	465,973	
5 Average Balance (Over)/Under Collection		5,835,522	10,556,998	4,954,462	
6 Monthly rate (WACC)	Line 13/12	0.5782%	0.5782%	0.5782%	
7 Number of Months		12	12	12	
8 Interest Due (Owed)	Line 5 * Line 6 * Line 7	\$ 404,892	\$ 732,487	\$ 343,760	\$ 1,481,139
9 Interest Paid (Returned) in prior rider	N/A				1,152,892
10 Interest Due - Rider 10	Line 8 - Line 9				\$ 328,247
11 Gross Receipts Tax					1.004487
12 Interest Due - including GRT - Rider 10	Line 10 * Line 11				\$ 329,720
13 Weighted average cost of capital (WACC)		6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	

NOTE A: Docket 2013-59-E

NOTE B: Estimated Year 3 lost revenue and revenue collections have been included in the interest true-up. Assumed 2018 collection on Rider 10 Exhibit 2, page 1 of 3.

Year 2016 - DSM		2016	2017	2018	Total
14 Revenue Requirement before interest	Year 2016, Exhibit 1	\$ 6,480,381	\$ -		\$ 6,480,381
15 Revenue Collections	Rider 10, Exhibit 2	5,730,973	687,354	31,261	6,449,588
16 (Over) / Under Collection	Line 14 - Line 15	749,408	(687,354)	(31,261)	30,792
17 Cumulative (Over)/Under Collection	Line 16 + Prior Year Line 17	749,408	62,054	30,792	
18 Average Balance (Over)/Under Collection		374,704	405,731	46,423	
19 Monthly rate (WACC)	Line 26/12	0.5782%	0.5782%	0.5782%	
20 Number of Months		12	12	12	
21 Interest Due (Owed)	Line 18 * Line 19 * Line 20	\$ 25,998	\$ 28,151	\$ 3,221	57,371
22 Interest Paid (Returned) in Prior Rider	N/A				54,403
23 Interest Due - Rider 10	Line 21 - Line 22				\$ 2,968
24 Gross Receipts Tax					1.004487
25 Interest Due - including GRT - Rider 10	Line 23 * Line 24				\$ 2,981
26 Weighted average cost of capital (WACC)		6.9384% NOTE A	6.9384% NOTE A	6.9384% NOTE A	

NOTE A: Docket 2013-59-E

NOTE B: Estimated 2018 revenue included at revised requested amount shown on Rider 10 Exhibit 2, page 1 of 3.



Duke Energy Carolinas  
For the Period January 2014 - December 31, 2018  
Docket Number 2018-xx-E  
Non-Residential Interest Calculation Year 2017

Non-Residential

Year 2017 - Energy Efficiency		2017	2018	Total
1 Revenue Requirement before interest	Year 2017 Exhibit 1	\$ 33,701,645	\$ 9,466,867	\$ 43,168,512
2 Revenue Collections	Rider 10, Exhibit 2	17,081,335	3,625,467	20,706,802
3 (Over) / Under Collection	Line 1 - Line 2	16,620,310	5,841,400	22,461,710
4 Cumulative (Over)/Under Collection	Line 3 + Prior Year Line 4	16,620,310	22,461,710	
5 Average Balance (Over)/Under Collection		8,310,155	19,541,010	
6 Monthly rate (WACC)	Line 13/12	0.5782%	0.5782%	
7 Number of Months		12	12	
8 Interest Due (Owed)	Line 5 * Line 6 * Line 7	\$ 576,592	\$ 1,355,833	\$ 1,932,425
9 Interest Paid (Returned) in prior rider	N/A			-
10 Interest Due - Rider 10	Line 8 - Line 9			\$ 1,932,425
11 Gross Receipts Tax				1.004487
12 Interest Due - including GRT - Rider 10	Line 10 * Line 11			\$ 1,941,096
13 Weighted average cost of capital (WACC)		6.9384% NOTE A	6.9384% NOTE A	

NOTE A: Docket 2013-59-E

NOTE B: Estimated Year 2 lost revenue and revenue collections have been included in the interest true-up. Assumed collection at on Rider 10 Exhibit 2, page 1 of 3.

Year 2017 - DSM		2017	2018	Total
14 Revenue Requirement before interest	Year 2017, Exhibit 1	\$ 7,000,484		\$ 7,000,484
15 Revenue Collections	Rider 10, Exhibit 2	6,368,636	-	6,368,636
16 (Over) / Under Collection	Line 14 - Line 15	631,848	-	631,848
17 Cumulative (Over)/Under Collection	Line 16 + Prior Year Line 17	631,848	631,848	
18 Average Balance (Over)/Under Collection		315,924	631,848	
19 Monthly rate (WACC)	Line 26/12	0.5782%	0.5782%	
20 Number of Months		12	12	
21 Interest Due (Owed)	Line 18 * Line 19 * Line 20	\$ 21,920	\$ 43,840	65,760
22 Interest Paid (Returned) in Prior Rider	N/A			-
23 Interest Due - Rider 10	Line 21 - Line 22			\$ 65,760
24 Gross Receipts Tax				1.004487
25 Interest Due - including GRT - Rider 10	Line 23 * Line 24			\$ 66,055
26 Weighted average cost of capital (WACC)		6.9384% NOTE A	6.9384% NOTE A	

NOTE A: Docket 2013-59-E

NOTE B: Estimated 2018 revenue included at revised requested amount on Rider 10 Exhibit 2, page 1 of 3.

BEFORE  
THE PUBLIC SERVICE COMMISSION  
OF SOUTH CAROLINA

DOCKET NO. 2018-~~72~~-E

In re:

Application of Duke Energy Carolinas, LLC  
for Approval of Demand-Side Management  
and Energy Efficiency Rider 10

DUKE ENERGY CAROLINAS, LLC'S  
AMENDED APPLICATION FOR  
APPROVAL OF RIDER 10

Pursuant to S.C. Code Ann. § 58-37-20 (2015) and 10 S.C. Code Reg. 103-819 and 823 (2012), the Rules of Practice and Procedure of the Public Service Commission of South Carolina (“Commission”), Duke Energy Carolinas, LLC (the “Company” or “Duke Energy Carolinas”) hereby applies to the Commission for approval of its demand-side management (“DSM”) and energy efficiency (“EE”) rider for 2019 (“Rider 10”). Duke Energy Carolinas also requests that the Commission allow it to recover the costs of its Interruptible Service and Stand-By Generator programs (“Existing DSM Programs”) as a component of this Rider 10. Finally, Duke Energy Carolinas reports the results of the study designed to assess the feasibility and estimated cost associated with its achievement of EE goals established in a settlement agreement in Docket Nos. 2011-158-E and 2011-68-E.

In support of this Amended Application, Duke Energy Carolinas shows the Commission the following:

**Name and Address of Duke Energy Carolinas**

1. The correct name and post office address of the Company is Duke Energy Carolinas, LLC, Post Office Box 1321, Charlotte, North Carolina 28201.

**Notices and Communications**

2. The names and addresses of the attorneys of Duke Energy Carolinas who are authorized to receive notices and communications with respect to this Amended Application are:

Rebecca J. Dulin  
Duke Energy Corporation  
1201 Main Street, Capital Center Building, Suite 1180  
Columbia, SC 29201  
Tel. 803.988.7130  
*rebecca.dulin@duke-energy.com*

Samuel J. Wellborn  
SOWELL GRAY ROBINSON STEPP & LAFFITTE, LLC  
1310 Gadsden Street  
Columbia, SC 29201  
Tel. 803.231.7829  
*swellborn@sowellgray.com*

### **Description of the Company**

3. The Company is engaged in the generation, transmission, distribution, and sale of electric energy at retail in the western portion of South Carolina and central and western portions of North Carolina. It also sells electricity at wholesale to municipal, cooperative, and investor-owned electric utilities. Duke Energy Carolinas is a public utility under the laws of South Carolina and is subject to the jurisdiction of this Commission with respect to its operations in this State. The Company also is authorized to transact business in the State of North Carolina and is a public utility under the laws of that state. Accordingly, its operations in North Carolina are subject to the jurisdiction of the North Carolina Utilities Commission.

### **Background**

4. Rider 10 seeks to recover from customers the amounts associated with the cost recovery mechanism the Commission approved in Order No. 2013-889, issued in Docket No. 2013-298-E, as well as the costs associated with Existing DSM Programs.

5. The recovery mechanism of the Company's EE/DSM portfolio is a shared savings model with three distinct components: (1) recovery of the costs the Company incurs to offer and deliver EE and DSM programs to customers; (2) recovery of net lost revenues incurred for up to thirty-six (36) months of a measure's life for EE programs; and (3) a shared savings incentive that is equivalent to 11.5% of net savings achieved through the Company's portfolio of EE/DSM programs.

6. The Existing DSM Program recovery method remains unchanged.

### Components of Rider 10

7. Calculations for Rider 10 were computed in accordance with the Application, testimony and the Commission's Order in Docket No. 2013-298-E. The specific components of Rider 10 include:

- a. Year 2014,<sup>1</sup> January 2014 – December 2014: true-up of shared savings and Year 4 lost revenues.
- b. Year 2015, January 2015 – December 2015: true-up of shared savings, true-up of Year 1, Year 2 and Year 3 lost revenues.
- c. Year 2016, January 2016 – December 2016: true-up of shared savings, true-up of Year 1 and Year 2 lost revenues and an estimate of Year 4 lost revenues.
- d. Year 2017, January 2017 – December 2017: true-up of program costs, shared savings and Year 1 of lost revenue and an estimate of Year 3 lost revenues.
- e. Year 2018, January 2018 – December 2018: estimate of Year 2 lost revenues.
- f. Year 2019, January 2019 – December 2019: estimate of program costs, shared savings, and Year 1 lost revenues, as well as an estimate of 2019 existing DSM program costs.

~~8. ——— Lost revenues associated with participants enrolled in certain vintages have been removed and will be reflected in rates filed for approval in future proceedings.~~

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<sup>1</sup> In the Company's 2013 filing, the nomenclature for a vintage changed from "Vintage" year to "Year 2014," "Year 2015," etc.

### Rider 10 Rate Overview

9.8. The revenue Duke Energy Carolinas proposes to recover through the proposed Rider 10<sup>2</sup> is as follows:

- \$~~42,969,864~~48,552,591 for Residential Customers (Exhibit A, Line 15) and
- \$~~62,585,978~~71,201,272 for Non-Residential Customers (Exhibit A, Line 66).

For Rider 10, because non-residential customers can opt-out of various components and vintage years of EE/DSM, those billing factors were separated to reflect non-residential customer participation in EE programs, DSM programs, or both EE and DSM programs. The proposed Rider 10 billing factors include prospective and true-up components. Based on the total costs to be recovered under the proposed Rider 10, as shown on Exhibit A, the billing factors applicable to South Carolina customers for the billing period January 1, 2019 through December 31, 2019, would be as follows:

<b>Residential Billing Factors</b>	<b>¢/kWh</b>
True-up Component for Years 2014, 2015, 2016 and 2017	0. <del>4698</del> <u>1911</u>
Prospective Component for Vintage Years <del>2017</del> <u>2016</u> – 2019	0. <del>4907</del> <u>5552</u>
Residential Rider 10 (Total)	0. <del>6605</del> <u>7463</u>

<b>Non-Residential Billing Factors</b>	<b>¢/kWh</b>
Year 2014 EE Participant – True up	0.0015
Year 2014 DSM Participant – True up	0.0010
Year 2015 EE Participant – True up	0. <del>0426</del> <u>0438</u>
Year 2015 DSM Participant – True up	0.0029
Year 2016 EE Participant – True up	<del>(0.0028)</del> <u>0177</u>
Year 2016 DSM Participant – True up	0.0006

<sup>2</sup> Billed at 100%, pursuant to Order 2013-889.

Year 2017 EE Participant – True up	0. <del>5307</del> 5596
Year 2017 DSM Participant – True up	0.0128
<u>Year 2016 EE Participant - Prospective</u>	<u>0.0403</u>
Year 2017 EE Participant – Prospective	0. <del>0297</del> 1345
Year 2018 EE Participant – Prospective	0.1267
Year 2018 DSM Participant – Prospective	0.0058
Year 2019 EE Participant – Prospective	0.5193
Year 2019 DSM Participant – Prospective	0.1341

~~10.9.~~ The proposed tariff sheet for Rider 10 is attached as Exhibit B to the Amended Application. A summary of the calculations used to determine these billing factors and the revenue requirement for Rider 10 is attached as Exhibit A to the Amended Application. The supporting calculations for Exhibit A are also attached. A detailed description and evaluation of the Company's EE and DSM programs for 2017 is set forth in Rider 10, Exhibit 5.

#### **Settlement Agreement Analysis of Energy Efficiency Portfolio**

~~11.10.~~ As a component of the Revised Settlement Agreement in Docket No. 2013-298-E, the Company agreed to develop a study designed to assess the feasibility and estimated cost associated with its achievement of aspirational Energy Efficiency Goals established in the settlement agreement in Docket Nos. 2011-158-E and 2011-68-E, *i.e.*, an annual savings target of one percent (1%) of the previous year's retail electricity sales beginning in 2015 and a cumulative savings target of seven percent (7%) of retail electricity sales over the five-year time period of 2014 - 2018. As required under the Revised Settlement Agreement, the Company has provided an update to the Energy Efficiency Analysis Study which accounts for the updated actual savings in 2017 as well as an updated projection of 2018 - 2019 in the Base Portfolio. The methodology for estimating the size and cost of the Incremental Portfolio is unchanged compared to last year. The updated Analysis Study is attached to this application as Rider 10 Exhibit 8.

### Conclusion and Request for Approval

~~12.11.~~ Based on the foregoing, the Company respectfully requests that the Commission grant its application seeking approval of Rider 10 as described in this Amended Application and supporting exhibits. Additionally, the Company acknowledges that the Commission, in Order No. 2018-205, required that notice of the filing be made, and held the Company's request for waiver of the hearing in abeyance until the intervention period has expired~~would ask the Commission to allow the proposed rate to be put into effect without notice and hearing pursuant to S.C. Code § 58-27-870(F) (2015).~~ The proposed rates do not require a determination of the entire rate structure and overall rate of return, and will facilitate an orderly rate administration.

Submitted this the ~~2nd~~ 1st day of ~~March~~ May, 2018.




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Rebecca J. Dulin  
Senior Counsel  
Duke Energy Carolinas, LLC  
1201 Main Street, Capital Center Bldg, Suite 1180  
Columbia, SC 29201  
Tel. 803-988-7130  
*rebecca.dulin@duke-energy.com*

Samuel J. Wellborn  
SOWELL GRAY ROBINSON STEPP & LAFFITTE, LLC  
1310 Gadsden Street  
Columbia, SC 29201  
Tel. 803.231.7829  
*swellborn@sowellgray.com*



**Rider 10 Exhibits**

<u>AMENDED</u> Exhibit A	Summary for Rider EE Exhibits and Factors
<u>AMENDED</u> Exhibit B	Tariff Sheet
Year 2014 Exhibit 1, <u>as filed</u> <u>March 2, 2018</u>	True Up of Shared Savings and Year 1, 2, 3 and 4 Lost Revenues Applicable to Residential and Non-Residential Customers
Year 2014 Exhibit 2, <u>as filed</u> <u>March 2, 2018</u>	Load Impacts and Estimated Revenue Requirements for Program Year 2014
Year 2014 Exhibit 3, <u>as filed</u> <u>March 2, 2018</u>	Allocation Factors, Vintage Year 2014
<u>AMENDED</u> Year 2015 Exhibit 1	True-up of Shared Savings and Year 1 ,2 and 3 Lost Revenue; Estimate of Year 4 Lost Revenue Applicable to Residential and Non-Residential Customers
Year 2015 Exhibit 2, <u>as filed</u> <u>March 2, 2018</u>	Load Impacts and Estimated Revenue Requirements for Program Year 2015
Year 2015 Exhibit 3, <u>as filed</u> <u>March 2, 2018</u>	Allocation Factors, Vintage Year 2015
<u>AMENDED</u> Year 2016 Exhibit 1	True-up of Shared Savings and Year 1 and 2 Lost Revenue; Estimate of Year 3 Lost Revenue Applicable to Residential and Non-Residential Customers
Year 2016 Exhibit 2, <u>as filed</u> <u>March 2, 2018</u>	Load Impacts and Estimated Revenue Requirements for Program Year 2016
Year 2016 Exhibit 3, <u>as filed</u> <u>March 2, 2018</u>	True up of Year 1 Shared Savings, Program Costs and Lost Revenues; Estimate of Year 3 Lost Revenue
<u>AMENDED</u> Year 2017 Exhibit 1	Estimated Year 2 Lost Revenues – Year 2017
Year 2017 Exhibit 2, <u>as filed</u> <u>March 2, 2018</u>	Load Impacts and Estimated Revenue Requirements for Program Year 2017
Year 2017 Exhibit 3, <u>as filed</u> <u>March 2, 2018</u>	Actual Existing DSM Program Costs – Year 2017

Year 2017 Exhibit 4, <a href="#"><u>as filed March 2, 2018</u></a>	Allocation Factors, Year 2017
Year 2017 Exhibit 5, <a href="#"><u>as filed March 2, 2018</u></a>	Actual Program Costs – Year 2017
Year 2017 Exhibit 6, <a href="#"><u>as filed March 2, 2018</u></a>	Changes from Rider 8 Due to Application of M&V and Participation
Year 2018 Exhibit 1, <a href="#"><u>as filed March 2, 2018</u></a>	Estimate of Year 2 Lost Revenues
Year 2019 Exhibit 1, <a href="#"><u>as filed March 2, 2018</u></a>	Estimated Annual Rider Applicable to Residential Customers
Year 2019 Exhibit 1, page 2, <a href="#"><u>as filed March 2, 2018</u></a>	Estimated Annual Riders Applicable to Non-Residential Customers
Year 2019 Exhibit 2, <a href="#"><u>as filed March 2, 2018</u></a>	Load Impacts and Estimated Revenue Requirements for Program Year 2019
Year 2019, Exhibit 3, <a href="#"><u>as filed March 2, 2018</u></a>	Allocation Factor Estimate for 2019
Rider 10 Exhibit 1, Page 1, <a href="#"><u>as filed March 2, 2018</u></a>	Lost Revenue Summary – Year 2014
<a href="#"><u>AMENDED</u></a> Rider 10 Exhibit 1, Page 2	Lost Revenue Summary – Year 2015
<a href="#"><u>AMENDED</u></a> Rider 10 Exhibit 1, Page 3	Lost Revenue Summary – Year 2016
<a href="#"><u>AMENDED</u></a> Rider 10 Exhibit 1, Page 4	Lost Revenue Summary – Year 2017
Rider 10 Exhibit 1, Page 5, <a href="#"><u>as filed March 2, 2018</u></a>	Lost Revenue Summary – Year 2018
Rider 10 Exhibit 1, Page 6, <a href="#"><u>as filed March 2, 2018</u></a>	Lost Revenue Summary – Year 2019
Rider 10 Exhibit 2, page 1, <a href="#"><u>as filed March 2, 2018</u></a>	DSM/EE Revenues Collected from Riders (By Vintage)

Rider 10 Exhibit 2, page 2, <u>as filed March 2, 2018</u>	Revised Exhibit Summary for 2018 Estimated Revenue
Rider 10 Exhibit 2, page 3, <u>as filed March 2, 2018</u>	Revised Forecasted Sales for Years 2014-2018
Rider 10 Exhibit 3, page 1, <u>as filed March 2, 2018</u>	Forecasted kWh Sales for Rate Period (Years 2014-2019)
Rider 10 Exhibit 3, page 2, <u>as filed March 2, 2018</u>	Forecasted kWh Net Metering Impacts for Year 2019
<u>AMENDED</u> Rider 10 Exhibit 4, Page 1	Residential Interest Calculation – Years 2014-2015
<u>AMENDED</u> Rider 10 Exhibit 4, Page 2	Residential Interest Calculation - Years 2016-2017
Rider 10 Exhibit 4, Page 3, <u>as filed March 2, 2018</u>	Non-Residential Interest Calculation – Year 2014
<u>AMENDED</u> Rider 10 Exhibit 4, Page 4	Non-Residential Interest Calculation – Year 2015
<u>AMENDED</u> Rider 10 Exhibit 4, Page 5	Non-Residential Interest Calculation – Year 2016
<u>AMENDED</u> Rider 10 Exhibit 4, page 6	Non-Residential Interest Calculation – Year 2017
Rider 10 Exhibit 5 <u>(not re-filed)</u>	Evaluation, Measurement and Verification Report
Rider 10 Exhibit 6 <u>(not re-filed)</u>	Description and Evaluation of EE and DSM Programs for 2017
Rider 10 Exhibit 7 <u>(not re-filed)</u>	Vintage Years 2014, 2015, 2016, 2017 and 2018 Non-Residential Opt-Out Data
Rider 10 Exhibit 8 <u>(not re-filed)</u>	Settlement Agreement Analysis of Energy Efficiency Portfolio

Duke Energy Carolinas, LLC

Electricity No. 4  
 South Carolina Tenth Revised Leaf No. 62  
 Superseding South Carolina Ninth Revised Leaf No. 62

RIDER EE (SC)  
 ENERGY EFFICIENCY RIDER

APPLICABILITY (South Carolina Only)

Service supplied under the Company's rate schedules is subject to approved adjustments for new energy efficiency and demand-side management programs approved by the Public Service Commission of South Carolina (PSCSC). The Rider Adjustments are not included in the Rate Schedules of the Company and therefore, must be applied to the bill as calculated under the applicable rate. As of January 1, 2019, cost recovery under Rider EE consists of the four year term program, years 2014-2017, as well as rates under the continuation of that program for years 2018-2019 as outlined below. This rider applies to service supplied under all rate schedules except rate schedules OL, FL, PL, GL and NL for program years 2014-2019.

The Rider will recover the cost of Duke Energy Carolinas' Interruptible Service and Stand-By Generator programs ("Existing DSM Programs") based on the cost of bill credits and amounts paid to customers participating on these programs ("Program Costs"). Revenue requirements will be determined on a system basis and allocated to SC retail customer classes based on the class contribution to system peak demand.

GENERAL PROVISIONS

This Rider will recover the cost of the Company's energy efficiency and demand-side management programs beginning January 1, 2014, using the method approved by the PSCSC set forth in Order No. 2013-889.

TRUE-UP PROVISIONS

Rider amounts will initially be determined based on estimated kW and kWh impacts related to expected customer participation in the programs, and will be true-up on an annual basis as actual customer participation and actual kW and kWh impacts are verified. The true-up will reflect actual participation and EM&V results for the most recently completed vintage. If a customer participates in any vintage of programs, the customer is subject to the true-ups for any vintage of programs in which the customer participated.

RIDER EE OPT OUT PROVISION FOR QUALIFYING NON-RESIDENTIAL CUSTOMERS

The Rider EE increment applicable to energy efficiency programs and/or demand-side management programs will not be applied to the energy charge of the applicable rate schedule for Customers qualified to opt out of the programs where:

- a. The Customer has notified the Company in writing that it elects to opt out and that the opt-out customer has implemented its own energy management system or has performed or had performed for it an energy audit or analysis within the three year period preceding the opt out request and has implemented or has plans for implementing the cost-effective energy efficiency measures recommended in that audit or analysis; and
- b. Electric service to the Customer must be provided under:
  1. An electric service agreement where the establishment is classified as a "manufacturing industry" by the Standard Industrial Classification Manual published by the United States Government and where more than 50% of the electric energy consumption of such establishment is used for its manufacturing processes; or
  2. An electric service agreement for general service as provided for under the Company's rate schedules where the Customer's annual energy use is 1,000,000 kilowatt hours or greater in the billing months of the prior calendar year. Additionally, all other agreements billed to the same entity with lesser annual usage located on the same or contiguous properties are also eligible to opt out.

For Customers who elect to opt out of Energy Efficiency Programs, the following provisions also apply:

- Qualifying customers may opt out of the Company's energy efficiency programs each calendar year only during the designated annual two-month enrollment period. For the Rider EE 2019 Program Year, the enrollment period begins November 1, 2018 and ends December 31, 2018.
- Customers may not opt out of individual energy efficiency programs offered by the Company. The choice to opt out applies to the Company's entire portfolio of energy efficiency programs.
- If a customer participates in any vintage of energy efficiency programs, the customer, irrespective of future opt-out decisions, remains obligated to pay the remaining portion of the lost revenues for each vintage of efficiency programs in which the customer participated.
- Customers who elect to opt out during the two-month annual enrollment period immediately prior to the new Rider EE becoming effective may elect to opt in to the Company's energy efficiency program during the first 5 business days of March each calendar year. Customers making this election will be back-billed to the effective date of the new Rider EE.

South Carolina Tenth Revised Leaf No. 62

Effective for service rendered from January 1, 2019 to December 31, 2019

PSCSC Docket No. 2018-XX-E

Order No. 2018-XXX

Duke Energy Carolinas, LLC

Electricity No. 4  
 South Carolina Tenth Revised Leaf No. 62  
 Superseding South Carolina Ninth Revised Leaf No. 62

RIDER EE (SC)  
 ENERGY EFFICIENCY RIDER

For Customers who elect to opt out of Demand-Side Management Programs, the following provisions also apply:

- Qualifying customers may opt out of the Company's demand-side management program during the enrollment period between November 1, and December 31 immediately prior to a new Rider EE becoming effective on January 1 of the applicable year. (Qualifying new customers have sixty days after beginning service to opt out).
- If a customer elects to participate in a demand-side management program, the customer may not subsequently choose to opt out of demand-side management programs for three years.
- Customers who elect to opt out during the two-month annual enrollment period immediately prior to the new Rider EE becoming effective may elect to opt in to the Company's demand-side management program during the first 5 business days of March each calendar year. Customers making this election will be back-billed to the effective date of the new Rider EE.

Any qualifying non-residential customer that has not participated in an energy efficiency or demand-side management program may opt out during any enrollment period, and have no further responsibility to pay Rider EE amounts associated with the Customer's opt out election for energy efficiency and/or demand-side management programs.

**ENERGY EFFICIENCY RIDER ADJUSTMENTS (EEA) FOR ALL PROGRAM YEARS**

The Rider EE amounts applicable to the residential and nonresidential rate schedules for the period January 1, 2019 through December 31, 2019 including revenue-related taxes and utility assessments are as follows:

**Residential**

Vintage 2014, 2015, 2016, 2017, 2018, 2019	<u>0.7463¢ per kWh</u>
<b>Total Residential</b>	<b>0.7463¢ per kWh</b>

**Nonresidential**

	<u>Energy Efficiency</u>	<u>Demand-Side Management</u>
2014 Vintage*	0.0015¢ per kWh	0.0010¢ per kWh
2015 Vintage*	0.0438¢ per kWh	0.0029¢ per kWh
2016 Vintage*	0.0580¢ per kWh	0.0006¢ per kWh
2017 Vintage*	0.6941¢ per kWh	0.0128¢ per kWh
2018 Vintage*	0.1267¢ per kWh	0.0058¢ per kWh
2019 Vintage*	0.5193¢ per kWh	0.1341¢ per kWh

Total Vintage 2014, 2015, 2016, 2017 and 2018, 2019	1.4434¢ per kWh	0.1572¢ per kWh
<b>Total Nonresidential</b>	<b>1.6006¢ per kWh</b>	

\* Not Applicable to Rate Schedules OL, FL, PL, GL, and NL

Each factor listed under Nonresidential is applicable to nonresidential customers who are not eligible to opt out and to eligible customers who have not opted out. If a nonresidential customer has opted out of a Vintage(s), then the applicable energy efficiency and/or demand-side management charge(s) shown above for the Vintage(s) during which the customer has opted out, will not apply to the bill.

South Carolina Tenth Revised Leaf No. 62  
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Superseding South Carolina Ninth Revised Leaf No. 62RIDER EE (SC)  
ENERGY EFFICIENCY RIDERAPPLICABILITY (South Carolina Only)

Service supplied under the Company's rate schedules is subject to approved adjustments for new energy efficiency and demand-side management programs approved by the Public Service Commission of South Carolina (PSCSC). The Rider Adjustments are not included in the Rate Schedules of the Company and therefore, must be applied to the bill as calculated under the applicable rate. As of January 1, 2019, cost recovery under Rider EE consists of the four year term program, years 2014-2017, as well as rates under the continuation of that program for years 2018-2019 as outlined below. This rider applies to service supplied under all rate schedules except rate schedules OL, FL, PL, GL and NL for program years 2014-2019.

The Rider will recover the cost of Duke Energy Carolinas' Interruptible Service and Stand-By Generator programs ("Existing DSM Programs") based on the cost of bill credits and amounts paid to customers participating on these programs ("Program Costs"). Revenue requirements will be determined on a system basis and allocated to SC retail customer classes based on the class contribution to system peak demand.

GENERAL PROVISIONS

This Rider will recover the cost of the Company's energy efficiency and demand-side management programs beginning January 1, 2014, using the method approved by the PSCSC set forth in Order No. 2013-889.

TRUE-UP PROVISIONS

Rider amounts will initially be determined based on estimated kW and kWh impacts related to expected customer participation in the programs, and will be true-up on an annual basis as actual customer participation and actual kW and kWh impacts are verified. The true-up will reflect actual participation and EM&V results for the most recently completed vintage. If a customer participates in any vintage of programs, the customer is subject to the true-ups for any vintage of programs in which the customer participated.

RIDER EE OPT OUT PROVISION FOR QUALIFYING NON-RESIDENTIAL CUSTOMERS

The Rider EE increment applicable to energy efficiency programs and/or demand-side management programs will not be applied to the energy charge of the applicable rate schedule for Customers qualified to opt out of the programs where:

- a. The Customer has notified the Company in writing that it elects to opt out and that the opt-out customer has implemented its own energy management system or has performed or had performed for it an energy audit or analysis within the three year period preceding the opt out request and has implemented or has plans for implementing the cost-effective energy efficiency measures recommended in that audit or analysis; and
- b. Electric service to the Customer must be provided under:
  1. An electric service agreement where the establishment is classified as a "manufacturing industry" by the Standard Industrial Classification Manual published by the United States Government and where more than 50% of the electric energy consumption of such establishment is used for its manufacturing processes; or
  2. An electric service agreement for general service as provided for under the Company's rate schedules where the Customer's annual energy use is 1,000,000 kilowatt hours or greater in the billing months of the prior calendar year. Additionally, all other agreements billed to the same entity with lesser annual usage located on the same or contiguous properties are also eligible to opt out.

For Customers who elect to opt out of Energy Efficiency Programs, the following provisions also apply:

- Qualifying customers may opt out of the Company's energy efficiency programs each calendar year only during the designated annual two-month enrollment period. For the Rider EE 2019 Program Year, the enrollment period begins November 1, 2018 and ends December 31, 2018.
- Customers may not opt out of individual energy efficiency programs offered by the Company. The choice to opt out applies to the Company's entire portfolio of energy efficiency programs.
- If a customer participates in any vintage of energy efficiency programs, the customer, irrespective of future opt-out decisions, remains obligated to pay the remaining portion of the lost revenues for each vintage of efficiency programs in which the customer participated.
- Customers who elect to opt out during the two-month annual enrollment period immediately prior to the new Rider EE becoming effective may elect to opt in to the Company's energy efficiency program during the first 5 business days of March each calendar year. Customers making this election will be back-billed to the effective date of the new Rider EE.

South Carolina Tenth Revised Leaf No. 62

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For Customers who elect to opt out of Demand-Side Management Programs, the following provisions also apply:

- Qualifying customers may opt out of the Company's demand-side management program during the enrollment period between November 1, and December 31 immediately prior to a new Rider EE becoming effective on January 1 of the applicable year. (Qualifying new customers have sixty days after beginning service to opt out).
- If a customer elects to participate in a demand-side management program, the customer may not subsequently choose to opt out of demand-side management programs for three years.
- Customers who elect to opt out during the two-month annual enrollment period immediately prior to the new Rider EE becoming effective may elect to opt in to the Company's demand-side management program during the first 5 business days of March each calendar year. Customers making this election will be back-billed to the effective date of the new Rider EE.

Any qualifying non-residential customer that has not participated in an energy efficiency or demand-side management program may opt out during any enrollment period, and have no further responsibility to pay Rider EE amounts associated with the Customer's opt out election for energy efficiency and/or demand-side management programs.

**ENERGY EFFICIENCY RIDER ADJUSTMENTS (EEA) FOR ALL PROGRAM YEARS**

The Rider EE amounts applicable to the residential and nonresidential rate schedules for the period January 1, 2019 through December 31, 2019 including revenue-related taxes and utility assessments are as follows:

**Residential**

Vintage 2014, 2015, 2016, 2017, 2018, 2019	<del>0.66057463</del> ¢ per kWh
<b>Total Residential</b>	<b>0.66057463¢ per kWh</b>

**Nonresidential**

	<u>Energy Efficiency</u>	<u>Demand-Side Management</u>
2014 Vintage*	0.0015¢ per kWh	0.0010¢ per kWh
2015 Vintage*	0.04260438¢ per kWh	0.0029¢ per kWh
2016 Vintage*	<del>(0.0028)</del> 0.0580¢ per kWh	0.0006¢ per kWh
2017 Vintage*	0.56046941¢ per kWh	0.0128¢ per kWh
2018 Vintage*	0.1267¢ per kWh	0.0058¢ per kWh
2019 Vintage*	0.5193¢ per kWh	0.1341¢ per kWh

Total Vintage 2014, 2015, 2016, 2017 and 2018, 2019	1.24774434¢ per kWh	0.1572¢ per kWh
<b>Total Nonresidential</b>	<b>1.40496006¢ per kWh</b>	

\* Not Applicable to Rate Schedules OL, FL, PL, GL, and NL

Each factor listed under Nonresidential is applicable to nonresidential customers who are not eligible to opt out and to eligible customers who have not opted out. If a nonresidential customer has opted out of a Vintage(s), then the applicable energy efficiency and/or demand-side management charge(s) shown above for the Vintage(s) during which the customer has opted out, will not apply to the bill.